IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF NEW MEXICO

DINÉ CITIZENS AGAINST RUINING OUR ENVIRONMENT, et al.,

Plaintiff,

v.

No. 1:19-CV-00703-WJ-JFR

DAVID LONGLY BERNHARDT, in his official capacity as Secretary of the United States Department of the Interior, *et al.*,

Federal Defendants.

MEMORANDUM OPINION AND ORDER DENYING PLAINTIFFS' MOTION FOR TEMPORARY RESTRAINING ORDER AND PRELIMINARY INJUNCTION and DISMISSING PLAINTIFFS' CLAIMS WITH PREJUDICE

THIS MATTER is before the Court upon the conclusion of briefing in the above-captioned case, briefing concerning approval by the Bureau of Land Management ("BLM")¹ for oil and gas production in the Mancos Shale/Gallup Sandstone formation (the "Mancos Shale") of the San Juan Basin. This Memorandum Opinion and Order incorporates conclusions of law to support its disposition of the Plaintiffs' Motion for Temporary Restraining Order and Preliminary Injunction, and is entered after extensive consideration of BLM's National Environmental Policy Act ("NEPA") documentation, the Environmental Assessment Addendum (the "EA Addendum") and briefing by the parties, as well as a full merits analysis of the administrative record. For the reasons stated herein, Plaintiffs' Motion for Temporary Restraining Order and Preliminary Injunction is hereby DENIED and Plaintiffs' claims are hereby DISMISSED with prejudice.

¹ All defined terms are consolidated in the Appendix: Table of Acronyms set forth as Attachment 1 to this Memorandum Opinion and Order.

PROCEDURAL HISTORY

This case originated from a separate, extensively litigated case brought by many of the same Plaintiffs challenging over 300 applications for permits to drill ("APDs") set for development in the Mancos Shale. That previous litigation began in 2015, when Plaintiffs filed their first Petition for Review of Agency Action with this Court challenging BLM's grant of APDs as violative of NEPA and the National Historic Preservation Act ("NHPA"). Named defendants included the Secretary of the United States Department of the Interior, BLM, and the Director of BLM. See Diné Citizens Against Ruining Our Env't v. Jewell, 2015 U.S. Dist. LEXIS 109986, 2015 WL 4997207 (D.N.M. Aug. 14, 2015) (J. Browning) (herein referred to as "Dine I"). Several oil and gas companies which own leases or drilling permits in the Mancos Shale intervened as defendants. Id. In Dine I, the Court denied Plaintiffs' request for preliminary injunction and the denial of injunctive relief was upheld on appeal. See Diné Citizens Against Ruining Our Environment v. Jewell, 839 F.3d 1276 (10th Cir. 2016). Plaintiffs then amended their petition three times to add additional challenged APDs and alleged (1) a NEPA violation for improperly tiering the environmental assessments ("EAs") to the 2003 environmental impact statement ("EIS"); (2) a NEPA violation for failing to prepare an EIS or supplement an existing EIS; and (3) a NHPA violation for failing to complete 16 USCS § 470f Section 106 consultation. See Dine I, at *2-7. Plaintiffs requested vacatur of all the challenged APDs, as well as an injunction against all future horizontal drilling and hydraulic fracturing in the Mancos Shale. Id. In 2018, the Court dismissed Plaintiffs' claims with prejudice, finding that while Plaintiffs had standing, their claims failed on the merits. Diné Citizens Against Ruining Our Environment v. Jewell, 312 F. Supp. 3d 1031, 1054 (D.N.M. 2018) (J. Browning).

On appeal, the Tenth Circuit held that (1) Plaintiffs failed to establish that BLM violated NHPA, (2) Plaintiffs were incorrect in asserting that the challenged APDs were geographically uncovered by the 2003 EIS, and (3) Plaintiffs failed to demonstrate that BLM violated NEPA with regard to the potential impact on air quality. *See Diné Citizens Against Ruining Our Env't v. Bernhardt*, 923 F.3d 831, 850-852 (10th Cir. 2019) (herein referred to as "Dine II"). Ultimately, the Tenth Circuit concluded that neither Plaintiffs' arguments nor the record supported any of Plaintiffs' claims except one: BLM failed to adequately consider the *cumulative* impacts on *water* resources as to five (5) specific EAs. *Id.* at 852. The Court's dismissal of Plaintiffs' NEPA claims was therefore reversed, and the Court was instructed to vacate the findings of no significant impact ("FONSI") and APDs associated with EAs 2014-0272, 2015-0036, 2015-0066, 2016-0029 and 2016-0200/2016-0076 and to remand these EAs to BLM to conduct a proper NEPA analysis. *Id.* at 859.

Both parties interpreted the Tenth Circuit's opinion as a victory, with Federal Defendants ("Defendants") concluding that the Tenth Circuit merely required a subsequent analysis on the cumulative impacts on water resources, and Plaintiffs celebrating the opinion as a new opportunity to relitigate issues relating to a number of APDs which far exceeded the scope of the Tenth Circuit's opinion.

Accordingly, three months following the Tenth's Circuits decision in *Dine II*, Plaintiffs filed the above-captioned case challenging the APDs covered by another 32 EAs in the Mancos Shale. *See* Doc. 1. Again, Plaintiffs motioned the Court for a temporary restraining order ("TRO") and preliminary injunction enjoining oil and gas development in the Marcos Shale. *See* Doc. 5. This motion and Plaintiffs' subsequent merits briefs and declarant affidavits together constitute the subject "Motion."

In Defendants' response to the Motion, they explain that BLM was already in the process of reviewing the EAs challenged by Plaintiffs in light of the guidance provided by the Tenth Circuit in *Dine II*. Doc. 44 at 1. In November of 2019, BLM provided an addendum (the "EA Addendum") to supplement the NEPA analysis for the original EAs, and provided a 30-day public comment period consistent with the requirements of NEPA, during which BLM received only two comments, one of which came from Plaintiffs. Doc. 111 at 16. On motion by both parties, the Court stayed the case pending BLM's finalization of the EA Addendum. Doc. 90; Doc. 91.

In February of 2020, BLM issued a finalized EA Addendum,² supplementing a total of 81 EAs covering 370 APDs which had been initially approved between 2014 and 2019. Doc. 111 at 17. In preparing the EA Addendum, BLM analyzed recent data, including the revised projection of 3,200 total new wells over a 20-year period as set forth in the 2018 reasonably foreseeable development scenario ("RFDS"). *Id.* Additionally, BLM reanalyzed water support data, air resources technical data, and the cumulative effects of "greenhouse gas" emissions, though the Tenth Circuit did not explicitly require it to do so. *Id.* For all of the 370 APDs, BLM concluded that the additional analysis, in conjunction with its earlier analysis, did not caution against reaffirming the APDs, as such research and analysis did not demonstrate that the APDs in question would affect the human environment or result in cumulative impacts not already disclosed. *Id.* Accordingly, BLM issued FONSIs to this effect for each of the relevant APDs. *Id.* It was then that

² The supplemented administrative record, and the EA Addendum itself, is an enormous set of documents, including maps, studies, analyses and conclusions provided to the Court and served on Plaintiffs via USB flash drive. In short, it assesses a need for the proposed oil and gas wells, describes the proposed action, explains the premises and environmental conditions of the Mancos Shale, details the environmental impact that the oil and gas project will have, and concludes with findings of no significant impact. Because the EA Addendum and complete record are not linear documents, but rather separate, indexed documents provided on external storage, their citations herein will correspond with the index number and the page number within the administrative record or applicable document set. For example, a citation to the Farmington Resource Management Plan with Record of Decision, 2003, is cited by its index number, AR-002553. The nearly 400 pages therein span to AR-002904. If a specific page is cited in the Farmington Resource Management Plan, its designation will be somewhere between AR-002553 and AR-002904, depending on the page therein cited.

the Plaintiffs amended their petition, challenging all of the APDs and EAs covered in the EA Addendum, Doc. 95, but base their entire argument against the APDs and EAs on a theory that the EA Addendum should be excluded from the administrative record before the Court.

BACKGROUND

I. Oil and Gas in the San Juan Basin

This litigation is centered around oil and gas drilling in the Mancos Shale of the San Juan Basin, one of the most prolific sources of natural gas in the country. *See Dine II*, 923 F.3d at 836. In the course of over 60 years, nearly 40,000 oil and gas wells have been drilled in the San Juan Basin, of which around 23,000 remain active. AR-002567; AR-008132; AR-045052. Horizontal drilling,³ though dating back as far as the 1980's in this area, has recently supplanted traditional oil and gas drilling techniques as it allows operators to better access the Mancos Shale.⁴ *See* AR-003560; AR-003800; AR-008133. While horizontal wells use more water than traditional drilling techniques, they reduce surface disturbance by allowing one well to access oil and gas resources that would otherwise require several vertical wellbores. AR-045055.

Hydraulic fracturing⁵ has been employed in the San Juan Basin since the late 1940s. AR-045680. In 2015, operators began to use "slick water stimulation," which uses non-potable water

³ "A horizontally drilled well starts as a vertical or directional well, but then curves and becomes horizontal, or nearly so, allowing the wellbore [i.e., drilled hole] to follow within a rock stratum for significant distances and thus greatly increase the volume of a reservoir opened by the wellbore." *Wyoming v. Zinke*, 871 F.3d 1133, 1137 (10th Cir. 2017) (alteration in original) (internal quotations omitted).

⁴ This Court previously found in *Dine I* that Plaintiffs failed to establish a distinction between the effects of horizontally fracked wells and vertically fracked wells on the environment or the public's enjoyment thereof. *Diné Citizens Against Ruining Our Env't v. Jewell*, 2015 WL 4997207, 2015 U.S. Dist. LEXIS 109986, at *164 (D. N.M. 2015).

⁵ "Hydraulic fracturing is a process designed to maximize the extraction of oil and gas resources. Fluids, usually water with chemical additives, are pumped into a geologic formation at high pressure. When the pressure exceeds the rock strength, it creates or enlarges fractures from which oil and gas can flow more freely. After the fractures are created, a propping agent (usually sand) is pumped into the fractures to keep them from closing." *Dine II*, 923 F.3d at 837 (internal quotations and citations omitted).

with high levels of dissolved solids. Many of the proposed APDs in this litigation are expected to utilize horizontal drilling and multistage hydraulic fracturing. AR-009428-29.

II. The National Environmental Policy Act

NEPA is a procedural act requiring agencies to "pause before committing resources to a project and consider the likely environmental impacts of the preferred course of action as well as reasonable alternatives." *N.M. ex rel. Richardson v. Bureau of Land Mgmt.*, 565 F.3d 683, 703 (10th Cir. 2008). This process serves to inform agency decisionmakers of the environmental consequences of proposed federal actions, as well as to ensure that information pertaining to such action is available to the public. *See* 42 U.S.C. § 4321; *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989). Notably, § 4321 imposes only procedural, rather than substantive, requirements. *See Hillsdale Envtl. Loss Prevention, Inc. v. U.S. Army Corps of Eng'rs*, 702 F.3d 1156, 1166 (10th Cir. 2012). Accordingly, a federal agency is not required under NEPA to follow substantive measures in the approval of federal actions—such as taking what environmental scholars believe to be the most environmentally sound course of action—but rather such agency is only required to take a "hard look" at the environmental impacts of federal decisions. *Robertson*, 490 U.S. at 350.

In accordance with NEPA's procedural requirements, an agency must prepare an EIS for federal actions significantly affecting the quality of the human environment. 42 U.S.C. § 4332(C). Agencies are not, however, required to prepare a full-scale EIS if they initially prepare an EA and, consistent with the findings of such EA, issue a FONSI concluding that a proposed action "will not significantly affect the environment." *Silverton Snowmobile Club v. U.S. Forest Serv.*, 433

F.3d 772, 780 (10th Cir. 2006) (citing Lee v. U.S. Air Force, 354 F.3d 1229, 1237 (10th Cir. 2004)).⁶

30 U.S.C. § 181 provides for the development of oil and gas resources on public lands. See Park Cnty. Res. Council, Inc. v. USDA, 817 F.2d 609, 620 (10th Cir. 1987), overruled on other grounds by Vill. of Los Ranchos de Albuquerque v. Marsh, 956 F.2d 970, 973 (10th Cir. 1992). BLM's practice with regard to oil and gas development—when it manages both the mineral and surface estates—involves three steps, during each of which BLM conducts NEPA review. Doc. 111 at 12. The first step is to develop an area-wide resource management plan ("RMP") delineating where the development will occur and the conditions under which the development and protection of resources plan will be bound. 43 U.S.C. § 1712(a). The second step is to issue leases for specific parcels of land within an area open to leasing, subject to the RMP. 43 U.S.C. § 1712(e). The third and final step is for lessees to submit an APD for each well that a lessee wishes to drill. 43 C.F.R. § 3162.3-1(c). Prior to such lessee's drilling operations, BLM conducts additional NEPA review and approves the APD. Pennaco Energy, Inc. v. U.S. Dep't of Interior, 377 F.3d 1147, 1151-52 (10th Cir. 2004) (quoting 43 C.F.R. § 3162.3-1(c)). Plaintiff's petition challenges this third step, the approval of APDs for lessees of individual wells.

III. BLM's Approval of Drilling in the Mancos Shale

BLM is the appropriate lead agency for the subject Mancos Shale oil and gas project, as lands and resources fall under the jurisdiction of the BLM's Farmington Field Office in New Mexico, which manages this land under its published RMP and decides what activities may take place on the subject lands.

⁶ An EA is "a concise public document" that serves to "[b]riefly provide sufficient evidence and analysis for determining whether to prepare" an EIS or a FONSI, 40 C.F.R. § 1508.9(a) (2018), and should include "brief discussions of the need for the proposal, of [reasonable] alternatives as required by [NEPA], [and] of the environmental impacts of the proposed action and alternatives," 40 C.F.R. § 1508.9(b).

In 2000, BLM began to revise its existing RMP, which was initially published in 1988. *See Dine II*, 923 F.3d at 836. In so doing, BLM contracted with the New Mexico Institute of Mining and Technology⁷ to develop an RFDS predicting the foreseeable oil and gas development likely to occur over the next twenty years. *Id.* The RFDS estimated that 9,970 new oil and gas wells would be drilled on federally managed lands in the New Mexico portion of the San Juan Basin. *Id.* Additionally, the RFDS estimated that only 180 oil wells would be drilled in the Mancos Shale during this period, as most reservoirs in the Mancos Shale were approaching depletion under thencurrent technologies (though the RFDS noted that the Mancos Shale had future oil and gas potential and should be further evaluated). *Id.* In 2003, BLM issued a proposed RMP and EIS, therein referring to predictions and analysis contained in the RFDS in order to assess alternatives for managing federal land in the San Juan Basin. *Id.* The approach adopted by BLM included analyzing the cumulative impacts of 9,942 wells in the San Juan Basin by assessing such factors as the likely air quality impact drilling the wells would have in the region. *Id.* at 836-37.

In 2010, BLM began to receive APDs for drilling the Mancos Shale, as interest in developing that area increased rapidly. *Id.* at 837. Between 2012 and 2014, approximately seventy new wells were completed in the Mancos Shale. *Id.* In 2014, BLM began preparing a new RFDS, which estimated that full development of the Mancos Shale would result in 3,960 new wells, and that the drilling for these wells would be primarily via horizontal drilling and multistage hydraulic fracturing. *Id.*

⁷ In its recitation of the facts underlying *Dine II*, the Tenth Circuit stated without citation that BLM contracted with the "New Mexico Institute of Mining and *Geology*." *Id.* (emphasis added). The Court assumes that the *Dine II* Court meant to refer to the "New Mexico Institute of Mining and *Technology*."

LAW

I. The Law Regarding Preliminary Injunctions

Plaintiffs must make four showings before the Court may issue a preliminary injunction: (1) that they are likely to suffer irreparable injury unless the injunction issues, (2) that the threatened injury outweighs the damage the proposed injunction may cause BLM and the opposing parties, (3) that the injunction would not be adverse to public interest if issued, and (4) that they have a substantial likelihood of success on the merits. *See Winter v. Natural Res. Def. Council, Inc.*, 555 U.S. 7, 19, 129 S. Ct. 365 (2008) ("A plaintiff seeking a preliminary injunction must establish that he is likely to succeed on the merits, that he is likely to suffer irreparable harm in the absence of preliminary relief, that the balance of equities tips in his favor, and that an injunction is in the public interest.") (citing *Munaf v. Geren*, 553 U.S. 674, 688-89, 128 S. Ct. 2207 (2008)); *see also Resolution Trust Corp. v. Cruce*, 972 F.2d 1195, 1198 (10th Cir. 1992); *Automated Mktg. Sys., Inc. v. Martin*, 467 F.2d 1181, 1183 (10th Cir. 1972) (The movant bears the burden of showing that all four prongs have been satisfied.).

Preliminary injunction is an "extraordinary remedy," and should not be issued unless Plaintiffs' right to relief "is clear and unequivocal." *Kikumura v. Hurley*, 242 F.3d 950, 955 (10th Cir. 2001) (internal quotations omitted). To satisfy the Court that such an extraordinary remedy is warranted, a plaintiff must "invariably show that it does not have an adequate remedy at law." *N. Cal. Power Agency v. Grace Geothermal Corp.*, 469 U.S. 1306, 1306, 105 S. Ct. 459 (1984).

Because a preliminary injunction is a mechanism meant only to preserve the relative positions of the parties until a disposition on the merits is made, the Tenth Circuit has identified certain, especially disfavored preliminary injunctions that are more likely to contravene this purpose: (1) ones which alter the status quo, (2) ones which compel activity on the part of the

enjoined party, rather than restrict or prohibit activity, and (3) ones which "afford the movant all the relief that it could recover at the conclusion of a full trial on the merits." *Schrier v. Univ. of Colo.*, 427 F.3d 1253, 1258 (10th Cir. 2005) (internal quotations and citations omitted); *accord Westar Energy, Inc. v. Lake*, 552 F.3d 1215, 1224 (10th Cir. 2009) (citations omitted).

II. The Law Regarding NEPA and the APA

NEPA does not provide for a private right of action for judicial review, and thus, Plaintiffs' claims must be reviewed under the Administrative Procedure Act (the "APA"). 5 U.S.C. § 706(2)(A); Lujan v. Nat'l Wildlife Fed'n, 497 U.S. 871, 882-83 (1990). Under the APA, the Court grants an agency decision "a presumption of regularity," and confines its review to the administrative record before the agency at the time of the decision. Citizens to Pres. Overton Park, Inc. v. Volpe, 401 U.S. 402, 415 (1971), abrogated on other grounds by Califano v. Sanders, 430 U.S. 99 (1977); N.M. Health Connections v. U.S. Dep't of Health & Human Servs., 946 F.3d 1138, 1161 (10th Cir. 2019); see Fed. R. App. P. 16 ("The record on review for enforcement of an agency order consists of . . . the order involved; . . . any findings or report on which it is based; and . . . the pleadings, evidence, and other parts of the proceedings before the agency.") (emphasis added). The Court does not set aside the decisions of an agency unless it finds them to be "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law," 5 U.S.C. § 706(2)(A), and NEPA does not require an agency to discuss all potential environmental impacts in great detail, nor does it require an agency to elevate environmental concerns over its other considerations, Dine I, 2015 U.S. Dist. LEXIS, at *64-65 (citing Utah Shared Access Alliance v. U.S. Forest Serv., 288 F.3d 1205, 1213 (10th Cir. 2002) and Baltimore Gas and Elec. Co. v. NRDC, 462 U.S. 87, 97; 103 S. Ct. 2246 (1983)). An agency must merely consider all the relevant factors and articulate a legitimate connection between the facts found pursuant to its research and the choice ultimately made. *See Balt. Gas*, 462 U.S. at 105.

While the Court's authority to abrogate BLM decisions is restricted under the APA, the Federal Land Policy and Management Act (the "FLPMA") and other similar laws as well as Tenth Circuit precedent do impose certain obligations on BLM. Namely, BLM must operate in a way that does not prevent unnecessary degradation of the land or its uses, which requires them to manage the lands in such a way as to protect scenic, historical, resource, archeological, hunting, fishing, camping, and certain other recreational use of the relevant parcels. *See* 43 U.S.C. §§ 1701(a)(8); *Davis v. Mineta*, 302 F.3d 1104, 1114 (10th Cir. 2002) (noting that the purpose of NEPA is to "safeguard against environmental harms"); *see also Wilderness Workshop v. United States BLM*, 2008 WL 1946818, 2008 U.S. Dist. LEXIS 106584, at *17 (D. Co. 2008).

III. The Law Regarding Predetermination

When analyzing whether an agency's proposed action is in violation of NEPA, one factor to consider is whether the agency predetermined the results of its environmental analyses in taking the required "hard look" at the consequences of a proposed action. A predetermination analysis is also helpful to courts when determining a party's remedy or whether a federal agency will be allowed to supplement its NEPA documentation. *See Sierra Club, Inc. v. Bostick*, 539 Fed. Appx. 885, 893 (10th Cir. 2013) (noting the holding of *Davis*, 302 F.3d 1104—that a finding of predetermination makes it more likely that an agency failed to take a hard look) (citing *Forest Guardians v. U.S. Fish & Wildlife Serv.*, 611 F.3d 692, 713 (10th Cir. 2010)). As the Tenth Circuit has held, a "stringent standard must be met for [the Court] to conclude that an agency violated NEPA by predetermining the outcome of its environmental analysis," and Plaintiffs "must meet a high standard to prove predetermination." *U.S. Fish & Wildlife*, 611 F.3d at 714. Moreover,

predetermination is found only when an agency "irreversibly and irretrievably commit[s] itself to a plan of action that is dependent upon NEPA environmental analysis producing a certain outcome[] before the agency has completed that environmental analysis—which of course is supposed to involve an objective, good faith inquiry into the environmental consequences of the agency's proposed action." *Id.* at 715 (emphasis added). "Irreversibly" and "irretrievably," however, are discrete terms meant to establish a threshold for which agency actions do and do not violate NEPA's requirements; they do not require an analysis to be flawless prior to the initiation of a proposed action, nor do they bar an agency from beginning a proposed development project when such agency's development commitments to oil and gas lessees can still be reversed. Indeed, the terminology, as well as the underlying law, grants a good deal of deference to the agency, and deficiencies in an EA "that are mere 'flyspecks' and do not defeat NEPA's goals of informed decisionmaking and informed public comment will not lead to reversal." *Richardson*, 565 F.3d at 704.

IV. The Law Regarding Supplementation

A court is not restricted from incorporating NEPA addenda into its review. As long as a federal agency is free to modify its course, supplemental information and analysis may continue to form the agency's decisionmaking, and thereby, a court's impression of its proposed action, the administrative record, and the degree of commitment the agency has undertaken attendant to a proposed development project. *See Jarita Mesa Livestock Grazing Ass'n v. United States Forest Serv.*, 301 F. Supp. 3d 1010, 1035 (10th Cir. 2017) ("So long as an agency is free to change its mind, environmental information can still play a meaningful role in determining how an agency will act."). Furthermore, supplementation is often encouraged by courts when relevant NEPA documentation is insufficient. *See Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 370-71 (1989)

(While the "subject of postdecision supplemental [analysis] is not expressly addressed in NEPA[,] preparation of such statements . . is at times necessary to satisfy the Act's action-forcing purpose.") (internal quotations omitted). Indeed, the Tenth Circuit in *Dine II* acknowledged the possibility of supplementation, and Plaintiffs in that case even alleged in their petition that BLM *should* have supplemented existing NEPA documents. *See Dine II*, 923 F.3d at 854 (rejecting argument that a finding of a NEPA violation "would automatically foreclose authorization of all individual activities in the planning area once . . . BLM initiates *an RMP amendment process*"; "Appellants'... Petition alleges, as relevant on appeal: ... a NEPA violation for failing to prepare an EIS *or supplement an existing EIS*[.]") (internal quotations omitted) (emphasis added). Plaintiffs *now* contend that BLM's supplementation measures should not be considered under a theory of predetermination.

Some courts, in deciding whether to allow revision to the record or vacate an agency's decision altogether, have articulated a balancing test weighing (1) the seriousness of a NEPA document's deficiency and (2) any doubts such deficiency may raise about the overall validity of an agency's decision against (3) the detriment that may result from vacatur. See, e.g., Allied-Signal, Inc. v. NRC, 988 F.2d 146, 150-51, 300 U.S. App. D.C. 198 (D.C. Cir. 1993); Cal. Communities Against Toxics v. U.S. EPA, 688 F.3d 989, 992 (9th Cir. 2012). Other courts have found that proper supplementation actually weighs on whether a court should grant a plaintiff's requested relief. See Friends of the Clearwater v. Dombeck, 222 F.3d 552, 560 (9th Cir. 2000)

⁸ While the Tenth Circuit has not explicitly adopted this balancing test, it has been used in the District of Colorado. See Diné Citizens Against Ruining Our Env't v. United States Office of Surface Mining Reclamation & Enforcement, 2015 U.S. Dist. LEXIS 45261, 2015 WL 1593995 (D. Colo. 2015) abrogated on other grounds by Dine Citizens Against Ruining Our Env't v. United States Office of Surface Mining Reclamation & Enforcement, 643 Fed. Appx. 799 (10th Cir. 2016). Interestingly, though the Tenth Circuit did not comment on the balancing test, it appears from the brief circuit opinion that the district court was overturned because the federal agency in that case supplemented its NEPA material, rendering moot the plaintiffs' complaints. See 643 Fed. Appx. at 799.

(Evidence that "an agency has rectified a NEPA violation after the onset of legal proceedings . . . is relevant to the question of whether relief should be granted.").

QUESTIONS PRESENTED

There are two primary issues central to the Court's disposition on the Motion. The first issue central to the Court's ruling is whether the Court will allow BLM to supplement its initial environmental assessment with the EA Addendum or foreclose BLM's supplementation altogether and confine its review to BLM's unsupplemented NEPA documentation. Ultimately, this issue may be determinative of the outcome of the Court's merits analysis because the Tenth Circuit found in *Dine II* that certain other APDs were deficient as to cumulative water consumption, and, as Plaintiffs believe, this deficiency may exist as to the APDs challenged here if BLM is barred from supplementing them with additional analysis. Accordingly, Plaintiffs ask the Court to bar BLM's supplementation, which requires the Court to decide (1) whether BLM improperly predetermined its previous decision to grant the APDs, and (2) whether supplementation is appropriate as opposed to vacatur of the APDs.

The second issue central to the Court's ruling is the merits determination itself. Plaintiffs must satisfy the requirements of the preliminary injunction analysis set forth in *Winter v. Natural Res. Def. Council*, which requires as its final prong that Plaintiffs establish that they are likely to succeed on the merits. *See* 555 U.S. at 19. However, as explained herein, because the Court's review is confined to the administrative record under the APA, satisfaction of this prong requires a wholesale merits analysis. Thus, the Court must determine whether BLM took a satisfactory look at relevant factors when conducting its EA, and ultimately, whether BLM complied with the requirements of NEPA.

DISCUSSION

I. Jurisdiction

As a preliminary matter, Plaintiffs challenge certain of BLM's APDs and proposed APDs which aren't yet approved or have been permanently abandoned. Over those unapproved APDs that do not currently represent "final" agency action, the Court has no jurisdiction. Similarly, Plaintiffs' challenges to abandoned wells are moot, as any harms they may have caused are no longer redressable by the Court.

A. Challenges to Unapproved APDs

Under the APA, Plaintiffs must challenge a final agency action. 5 U.S.C. § 704; *Catron Cnty. Bd. of Comm'rs v. U.S. Fish & Wildlife Serv.*, 75 F.3d 1429, 1434 (10th Cir. 1996). An agency action is *final* if it "mark[s] the 'consummation' of the agency's decisionmaking process" and is a decision "by which rights or obligations have been determined or from which legal consequences will flow." *Bennett v. Spear*, 520 U.S. 154, 177-78 (1997) (internal quotations omitted). Absent a *final* agency decision, "the case is not ripe for consideration by the Court." *Nat'l Wildlife Fed'n v. EPA*, 945 F. Supp. 2d 39, 47 (D.D.C. 2013).

Here, Plaintiffs challenge several APDs which are not yet approved, and thereby do not meet the requirements of finality mandated for court review under the APA. Specifically, Plaintiffs speculate that BLM will fail to comply with NEPA in the future, but this cannot be a basis for their claim. *See Lujan*, 497 U.S. at 894 ("[W]e intervene in the administration of the laws only when, and to the extent that, a specific 'final agency action' has an actual or immediately threatened effect.").

Accordingly, the Court lacks jurisdiction to consider Plaintiffs' claims as to unapproved APDs, and dismisses all such claims involving APDs for which BLM has not yet issued a final decision.⁹

B. Challenges to Expired APDs and APDs for Permanently Abandoned Wells

Plaintiffs also challenge certain APDs which are either abandoned or expired. As explained below, Plaintiffs have alleged sufficient harm as to many of the APDs in question, but cannot do so as to APDs which do not contribute to this alleged injury. *See Park Cnty.*, 817 F.2d at 614-15 (finding APD challenge moot when well drilled and abandoned); *Ouachita Watch League v. U.S. Forest Serv.*, 2016 WL 3511691, at *3 (E.D. Ark. Mar. 16, 2016) (finding APD challenge moot once well drilled).

Claims become moot when "granting a present determination of the issues offered will [no longer] have some effect in the real world." *Rio Grande Silvery Minnow v. Bureau of Reclamation*, 601 F.3d 1096, 1110 (10th Cir. 2010) (quotation omitted). Plaintiffs' challenges to abandoned and expired APDs are clearly moot. Accordingly, the Court dismisses claims involving expired and abandoned wells. ¹⁰

II. Incorporating the EA Addendum

The most significant issue presently facing the Court is whether its review should include the supplemental analysis set forth in BLM's EA Addendum. As both parties are aware, if BLM's supplement is allowed to be incorporated into the Court's collective NEPA analysis, then, as explained below, Plaintiffs' arguments ultimately fail on the merits because BLM has corrected

⁹ The current status of the APDs in this matter is set forth on Exhibit A to Doc. 110. APDs for which BLM has not yet issued a final decision include APDs noted on the exhibit as "not submitted," "unapproved notice of staking," "notice of staking," "application for permit to drill" and "unapproved application for permit to drill." See Doc. 111, Exhibit A, B.

¹⁰ APDs which are expired or abandoned are noted on Doc. 111, Exhibit A as "expired," "abandoned," or "plugged and abandoned." See Doc. 111, Exhibit A, B.

its NEPA documentation consistent with the guidance of the Tenth Circuit in *Dine II*. However, if the Court concludes that BLM may *not* supplement the record under the Plaintiffs' theory that BLM predetermined the outcome of its EA, BLM's proposed APDs are more likely to warrant vacatur under the Tenth Circuit's finding that some of the underlying EAs were insufficient as to their analysis of the proposed drilling's cumulative impact on water resources. Plaintiffs accordingly stake much of their argument on the notion that BLM's supplementation efforts are disallowed.

To this end, Plaintiffs ask the Court to disregard BLM's supplemented NEPA analysis under a theory that BLM's decision to approve the Mancos Shale APDs was unlawfully "predetermined" prior to the completion of the environmental review required by NEPA under U.S. Fish & Wildlife. Plaintiffs structure their argument in the following way.

- (A) Plaintiffs refer to *Protect Key West, Inc. v. Cheney*, a case from the Southern District of Florida wherein the U.S. Navy was found to have violated NEPA because the documentation supporting a Navy-issued EA was prepared *after* the EA and FONSI were issued. 795 F. Supp. 1552, 1561–62 (S.D. Fla. 1992).
- (B) Plaintiffs argue that *Protect Key West* is similar to the case at hand, alleging that BLM's supplemental EA Addendum is a post hoc rationalization of bad faith environmental assessments and that BLM's conduct therefore satisfies the legal requirements of predetermination.
- (C) Plaintiffs contend that because BLM predetermined the outcome of its environmental assessments, supplementation of relevant NEPA documentation should be disallowed, and the subject APDs must thereby be vacated based on a review of the administrative record **excluding the supplemental material**.

A. Protect Key West

Plaintiffs liken *Protect Key West* to the present dispute because the documentation issued by the Navy was clearly prepared to cure the otherwise unsupported EA and FONSI initially issued, which Plaintiffs allege is precisely the purpose of BLM's supplemental EA. However, this reliance on the holding in *Protect Key West* is not helpful to Plaintiffs' position on

predetermination because the original EA prepared by the Navy in *Protect Key West* was deficient by all accounts. It consisted of eight typewritten pages with two pages devoted to the "Environmental Consequences" of the proposed project, each of which was dismissed based on what the court referred to as "conclusory 'findings'" without citation or discussion. 795 F. Supp. at 1559. The court found that the EA was "wholly inadequate"—that the Navy did not take a "hard look" under *Cabinet Mountains Wilderness* and thereby failed to evince good faith. *Id.* at 1559-60 (citing *Cabinet Mountains Wilderness v. Peterson*, 685 F.2d 678, 682 (D.C. Cir. 1982)). It was the outright, wall-to-wall insufficiency of the initial EA and FONSI, as well as a clear lack of good faith in assessing environmental consequences, that demonstrated the Navy's "Commit First, Ask Questions Later[]" approach to the project. *Id.* at 1561. The court ultimately held that allowing the Navy to proceed before demonstrating *any* attempt at NEPA compliance would restrict NEPA's ability to limit agency authority and overreach, frustrating the purpose of NEPA. *See id.*

While Plaintiffs present *Protect Key West* as an analogue to the issues at hand, it is not applicable to BLM's conduct. The case is only helpful to the Court in that it somewhat clarifies the threshold for the kind of gross inadequacy that fails the requirements of NEPA, an inadequacy so obvious and absolute that supplementation of an EA must be assumed to be a mere technicality and thereby inadequate to remedy the violation. Unlike the Navy in *Protect Key West*, the deficiency in BLM's previous EAs has no such inadequacy.

In contrast to the Navy's eight-page NEPA documentation in *Protect Key West*, BLM's documentation is over 100,000 pages long, and BLM's initial EA and FONSI were only demonstrably insufficient with regard to a discrete element of analysis covering a small subset of the APDs Plaintiffs contested. Furthermore, unlike the Navy in *Protect Key West*, BLM's EA Addendum does not offer post hoc studies purporting to justify a complete lack of mindfulness in

making the initial decision, but rather a supplemented analysis prepared in response to the Tenth Circuit's intervening decision and in compliance with supplementation procedures under NEPA. *See Marsh*, 490 U.S. at 370-71 (permitting use of a second, supplemental EIS to correct previous analysis, though supplemental measures were ultimately found unnecessary). There is no indication of an "irreversibl[e]" or "irretrievabl[e]" commitment to a development plan, nor is there any evidence that BLM failed to undertake "an objective, good faith inquiry into the environmental consequences of the agency's proposed action." *U.S. Fish & Wildlife*, 611 F.3d at 714.

Because of the obvious distinctions in BLM's conduct, Plaintiffs' reliance on *Protect Key West* does not inform the Court's decision as to whether BLM should be permitted to supplement its previous NEPA documentation with the EA Addendum. Accordingly, the Court must undergo its own predetermination and supplementation analysis.

B. Predetermination

Plaintiffs celebrated the Tenth Circuit's holding in *Dine II* vacating five of BLM's EAs for deficiencies as to the cumulative impact the proposed drilling would have on water resources, undoubtedly under the belief that a more complete record would reveal similar inadequacies in some other EAs issued by BLM between 2014 and now. However, BLM has now supplemented the EAs not only to cover cumulative impacts as to water, but also to further support its initial findings as to air and gas pollution. This action by BLM severely undermines any remaining claims Plaintiffs may have that BLM's environmental analysis fails under NEPA, and therefore Plaintiffs ask the Court to vacate the proposed APDs altogether without reviewing the

¹¹ BLM incorporated the up-to-date information and analysis, including a revised forecast of potential wells, AR-045038, the 2019 BLM New Mexico Water Support Document, AR-009358, the 2019 Cumulative BLM New Mexico Greenhouse Gas Emissions Supplemental White Paper, AR-009432, and the 2018 Air Resources Technical Report for Oil and Gas Development in New Mexico, Oklahoma, Texas and Kansas, AR-032864, among many others.

supplemented material. For the Court to ignore the supplemented EA Addendum, the Court would have to find that BLM predetermined the findings set forth in the EAs prior to supplementation, a finding Plaintiffs request under a theory that by releasing the 2014 RFDS for oil and gas activities in preparation for the Mancos Shale RMPA/EIS, BLM has shown that it "irreversibly and irretrievably" committed itself to a development plan that is dependent upon a certain outcome before BLM completed a proper analysis. ¹² See U.S. Fish and Wildlife, 611 F.3d at 714. If BLM committed itself "irreversibly and irretrievably," its actions would constitute predetermination sufficient to foreclose supplementation of the record. *Id*.

Importantly, the Tenth Circuit did not undergo a predetermination analysis as to BLM's conduct in *Dine II*. Such an analysis looks to whether an agency "irreversibly and irretrievably commit[s] itself to a plan of action that is dependent upon NEPA environmental analysis producing a certain outcome[] before the agency has completed that environmental analysis—which of course is supposed to involve an objective, good faith inquiry into the environmental consequences of the agency's proposed action." *Id*. Deficiencies later discovered in an EA "that are mere 'flyspecks' and do not defeat NEPA's goals of informed decisionmaking and informed public comment will not lead to reversal." *Richardson*, 565 F.3d at 704.

First, the Court is not convinced that BLM acted without objectivity or good faith as to the environmental consequences of its proposed development plan in the Mancos Shale. Instead,

¹² While a small sum of the granted APDs have resulted in commenced oil drilling operations, this is not indicative of an irretrievable commitment to the development of the Mancos Shale proposed by BLM. Importantly, the deficiency in BLM's EAs concerned individual assessment of the *cumulative* impact the wells would have on the local environment, and this cumulative figure is based on recent projections of oil activity. Indeed, even if *all* of the presently approved APDs result in drilling operations, the predicted total of oil and gas wells will not be reached. BLM may modify its plan, revoke APDs in the future, or otherwise abandon or adjust the scope of the project, rendering the cumulative estimated sum of oil and gas wells an obsolete figure. The commenced operation of a small number of wells is not a commitment to the type of large scale project which would violate NEPA under *U.S. Fish & Wildlife*, particularly when the deficiency found in the initial EAs was based on a cumulative figure. 611 F.3d at 714.

certain EAs were deficient as to one consideration important to their analysis: cumulative impacts on water resources.

Second, the Court does not accept Plaintiffs' contention that BLM merely updated the EA analysis to cover a previously sinister motivation to undertake the project without taking a hard look at the environmental consequences, nor Plaintiffs' claim that BLM's explanation that it was not reapproving the APDs in question is indicative of irreversible and irretrievable commitment to a course of action.

In fact, BLM explained in the EA Addendum that "[a]fter completing this additional analysis, BLM will review the [81] EAs and the associated 370 APDs and determine whether to affirm BLM's original decision finding no significant impact and approving the APD or whether to reconsider that decision." AR-045037; see Doc. 111 at 21. As BLM contends, it adopted this approach, as opposed to vacating its decision entirely, because it is often reluctant to take action that would unnecessarily harm the third-party lessees' reliance interests on APDs. Doc. 111 at 23. Reluctance is not *irreversible*, *irretrievable* commitment.

Moreover, BLM explains the steps taken:

- (1) For each challenged APD, BLM reopened its decisionmaking process,
- (2) BLM reviewed its collective NEPA analysis (including the 2003 RMP, original
- EA, EA Addendum, and public comments),
- (3) BLM determined in new FONSIs that the APDs would not significantly affect the environment, and
- (4) BLM affirmed its original approval of each APD.

Id. at 21-22; see AR-045107.

Plaintiffs would have the Court assume BLM's statements to be false based merely on the fact that these steps were taken by BLM *after* its initial decision was made to allow drilling in the Mancos Shale. Plaintiffs' contention is very reminiscent of their arguments as to *Protect Key West*. However, both NEPA and governing case law interpreting NEPA give deference to federal

agencies and no case precedent relating to NEPA, in the Tenth Circuit or elsewhere, supports the proposition that a court may make assumptions as to such an agency's motives. Instead, NEPA and its supporting case law provide for standards and tests which may be probative of ill-conceived environmental decisions and, perhaps, less than honest presentment of post facto justifications for uninformed environmental policy. BLM's actions, however, do not raise any concerns in this way. Unquestionably, some of the older EAs not covered in this litigation failed to initially consider the cumulative impacts on water resources that the proposed drilling in the Mancos Shale would have with respect to the larger projected sum of oil and gas wells as set forth in the 2014 RFDS. However, good faith efforts to conduct environmental analysis under NEPA nonetheless abound in both these old EAs from Dine II and the new EAs at issue in the instant case. Furthermore, if BLM claims that it was positioned to revoke APD grants upon completing the EA Addendum, the Court will defer to BLM's claim and find that it has not "irrevocably" or "irretrievably" committed itself to issuing APDs in the Mancos Shale absent evidence undermining BLM's statements. There being no such evidence, the Court finds that BLM did not predetermine its decision to grant the subject APDs for oil and gas development in the Mancos Shale.

C. Supplementation

While BLM did not improperly predetermine its decision to commence drilling in the Mancos Shale, in certain circumstances, supplementation may nonetheless be inappropriate. Thus, the Court should undertake an analysis as to whether review of BLM's supplemented NEPA material is appropriate, as opposed to review of only the initial EAs, FONSIs and APDs, for statutory compliance.

Plaintiffs' maintain that vacatur of all present and future wells is the only suitable remedy for their alleged harms, and that review of the supplemental EA Addendum for NEPA compliance should be disallowed. BLM responds that the EA Addendum properly supplements the NEPA analysis for the challenged APDs and should serve as the basis for review for three reasons. First, the supplementation was made consistent with NEPA, as the supplementation contains the additional information deemed necessary by the Tenth Circuit and formerly requested by Plaintiffs, plus the supplementation was subject to a 30-day notice and comment period. Second, BLM did not irreversibly commit itself to a course of action because it retained an ability to terminate pending APDs. Finally, Plaintiffs have received vis-à-vis this supplementation exactly what they requested and thus, can no longer claim prejudice.

While the "subject of postdecision supplemental [analysis] is not expressly addressed in NEPA[,] preparation of such statements . . is at times necessary to satisfy the Act's action-forcing purpose." *Marsh*, 490 U.S. at 370-71 (internal quotations omitted). Furthermore, considering the latitude afforded to federal agencies, vacating BLM action at this stage is an extreme remedy when a solution—supplementation—has already presented itself as a much more workable solution in curing any deficiencies in the proposed agency action. *See Volpe*, 401 U.S. at 415; *see also U.S. Dep't of Health & Human Servs.*, 946 F.3d at 1161.

Courts have also found that supplementation of the record after a deficiency is found is not necessarily improper. *Kunaknana v. Clark*, 742 F.2d 1145, 1149 (9th Cir. 1984) (finding supplemented record of decision that further explained agency's decision not an improper post hoc rationalization). And proper supplementation can actually be determinative on whether a court should grant requested relief. *See Friends of the Clearwater v. Dombeck*, 222 F.3d 552, 560 (9th Cir. 2000) (Evidence that "an agency has rectified a NEPA violation after the onset of legal proceedings . . . is relevant to the question of whether relief should be granted."). Other courts have articulated a balancing test that weighs the seriousness of a deficiency and any doubts such

deficiency may raise about the overall validity of an agency's decision against the detriment that may result from vacatur. *See, e.g., Allied-Signal, Inc. v. NRC*, 988 F.2d 146, 150-51, 300 U.S. App. D.C. 198 (D.C. Cir. 1993); *Cal. Communities Against Toxics v. U.S. EPA*, 688 F.3d 989, 992 (9th Cir. 2012).

This somewhat vaguely defined vacatur balancing test is best understood in light of the procedural trajectory of a similar case, a case which also presents the viability of post-decision supplementation, at least at the appellate level. In 2015, the same plaintiff presently spearheading the subject litigation, Dine Citizens Against Ruining the Environment ("Dine Citizens"), brought similar allegations against a surface mining reclamation decision by the United States Office of Surface Mining Reclamation & Enforcement ("OSM") in the District of Colorado, and the court vacated the EA, a decision ultimately overturned by the Tenth Circuit. See United States Office of Surface Mining Reclamation & Enforcement, 2015 U.S. Dist. LEXIS 45261 ("Dine v. OSM I") (incorporating into its analysis the vacatur balancing test and vacating OSM's EA because (1) OSM's failure to consider the mercury-related effects of its decision was "serious," (2) the failure to consider mercury-related effects cast doubt on the overall decision rendered by the agency, and (3) the potential harm of vacatur was minimal and "easily correctible").

OSM then issued a revised EA and FONSI, reapproved the permittee's application and appealed the opinion on grounds of constitutional mootness because OSM had corrected the issue. See United States Office of Surface Mining Reclamation & Enforcement, 643 Fed. Appx. at 799 ("Dine v. OSM II," and together with Dine v. OSM I, "Dine v. OSM"). The Tenth Circuit agreed with OSM, and found that there was no longer a live case or controversy, dismissed the appeal as constitutionally moot, and vacated the district court's opinion. Id.

The case of *Dine v. OSM* is important to the instant case for two reasons. First, *Dine v. OSM* stands for the proposition that a supplemented EA/FONSI is acceptable in certain contexts, and second, *Dine v. OSM* illustrates the application of the balancing test which, if not tipping in Plaintiffs' favor, undermines their demand for vacatur. In contrast to *Dine v. OSM*, the balancing test here clearly weighs in favor of Defendants.

More specifically, whereas OSM completely failed to consider mercury-related environmental impacts on endangered species, BLM only failed to consider *cumulative* water impacts as derived from a larger number of total wells than initially predicted. The omission by OSM is a serious deficiency (at least, that is what the opinion in *Dine v. OSM I* implies), while the deficiency by BLM identified in *Dine II* is more appropriately characterized as an oversight.

Moreover, though "serious" enough to frustrate NEPA if ignored absent supplementation, BLM's failure in *Dine II* does not lead the Court to conclude that the rest of the EA decisionmaking process is not credible. While lacking in a sufficiently robust analysis of cumulative water impact, BLM's prior analysis was comprehensive enough that ancillary analysis incorporating more contemporary environmental publications led BLM to same result, a result to which this Court will defer and which appears genuine from the record.¹³ What matters is whether the post hoc supplementation is improper, and BLM's EA Addendum does not represent improper

Of course Plaintiffs conten

¹³ Of course, Plaintiffs contend that this is post hoc rationalization by BLM, but as Defendants correctly argue, *any* supplemental NEPA analysis completed after an agency decision is technically *post hoc*, and supplemental NEPA analysis has been encouraged and even mandated by Courts. *See, e.g., Stand Up for Cal.! V. United States DOI*, 204 F. Supp. 3d 212, 236-37 (D. D.C. Sept. 6, 2016) (upholding previous decision not to vacate agency action as to allow defendants to undergo CAA notice requirements), *affirmed by Stand Up for Cal.! v. United States DOI*, 879 F.3d 1177, 434 U.S. App. D.C. 16 (D.C. Cir. 2018); 40 C.F.R. § 1502.9(c)(1)(ii), (2) (2018) (agencies "[m]ay also prepare supplements when the agency determines that the purposes of [NEPA] will be furthered by doing so."); *Hayes v. Chaparral Energy, LLC*, 2016 U.S. Dist. LEXIS 200382 (N.D. Ok., Mar. 29, 2016) (examining whether agency took a "hard look" at new information "to determine whether supplemental NEPA analysis is necessary"); *S. Utah Wilderness Alliance v. Norton*, 301 F.3d 1217, 1238 (10th Cir. 2002), *abrogated on other grounds by* 542 U.S. 55, 73, 124 S. Ct. 2373, 159 L. Ed. 2d 137 (2004) (noting that NEPA "require[s] an agency to take a 'hard look' at new information to assess whether supplementation might be necessary") (citations omitted); *Friends of the Clearwater*, 222 F.3d 552, 560 (9th Cir. 2000); *Clark*, 742 F.2d at 1149; *Marsh*, 490 U.S. at 370-71.

supplementation, particularly when BLM retained an option to alter its original decision approving the APDs and prepared additional supporting documentation for analysis proactively in response to an intervening Tenth Circuit decision.

Another consideration concerns the significant costs that will be incurred by Defendants in the event of vacatur. In *Dine v. OSM*, there was only one lessee, and the court found that the harms did not outweigh the seriousness of the NEPA violation in question because vacatur of the permits would not render the lessee unable to meet its contractual obligations. *Dine v. OSM I*, at *9-10. Moreover, the re-approval statement was "easily correctible," resulting in a short delay as to surface mining if the permits were vacated. *Id.* However, in this case BLM's EAs cover hundreds of APDs and many lessees will be negatively affected if BLM's APDs are vacated. *See infra Discussion Section III(B)*, *Plaintiffs have failed to establish that the balance of harms weighs in their favor*.

Considering the detail and apparent effort by BLM to comply with NEPA, both initially and following the Tenth Circuit's holding in *Dine II*, the Court finds that Plaintiffs fail the test set forth in *OSM* because vacating the APDs and mandating that BLM undergo a "paper exercise" to remedy an old deficiency when the costs associated with doing so far exceed the seriousness of the deficiency is completely unreasonable. In *Richardson*, the Tenth Circuit held that certain deficiencies in an EA were merely "flyspecks" that did not undermine the purpose of NEPA, and the record supports that BLM's now-supplemented water resource analysis is exactly the type of "flyspeck" to which *Richardson* refers. 565 F.3d at 704 (Deficiencies later discovered in an EA "that are mere 'flyspecks' and do not defeat NEPA's goals of informed decisionmaking and informed public comment will not lead to reversal."). The Court therefore finds that restricting BLM's ability to properly supplement its EAs under Plaintiffs' theory of predetermination and

vacatur would be an unduly harsh and extremely inefficient result and would constitute a misrepresentation of BLM's actual conduct.¹⁴

While BLM may have failed to assess cumulative impacts on water resources in five of the EAs underlying *Dine II*, such failure evidences no lack of consideration, objectivity or good faith under a predetermination inquiry considering the robust nature of BLM's other analyses, nor does a balance of the cumulative water deficiency against the costs of vacatur weigh in Plaintiffs' favor. Moreover, Plaintiffs have not sufficiently alleged that they will be prejudiced by supplementation under 5 U.S.C. § 706. *See Bar MK Ranches v. Yuetter*, 994 F.2d 735, 740 (10th Cir. 1993) ("[A]n allegation of a post hoc [supplementation to the record] does not in itself sufficiently allege prejudice.").

Accordingly, BLM's supplementation measures are permitted and the EA Addendum is hereby incorporated into the Court's review. The Court would only consider the remedy of vacatur to the extent that the administrative record established that BLM's decision as set forth in the entire administrative record, *including the EA Addendum*, was "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law" under § 706(2)(A) or otherwise in violation of NEPA. No such finding is warranted in this case and, as this Court has stated before, there is "no reason in ignoring the supplemental report if it meets [the] requirements, only to have [an agency] do it all over again—on the sole basis that it wasn't done earlier." *Ctr. for Biological Diversity v. Andre*, No. CV-01-1106-WJ, 2002 WL 35649725, at *4 (D.N.M. Sept. 4, 2002).

¹⁴ The Court is unable to find any precedent that supports a finding that the only solution when faced with such a relatively innocuous deficiency is gutting the entire EA/FONSI and APD approval process, just to force a federal agency to start from the ground up, particularly when the agency has otherwise performed its obligations under NEPA with apparent good faith. See High Country Conservation Advocates v. U.S. Forest Serv., 951 F.3d 1217, 1225 (10th Cir. 2020); see also Kunaknana v. Clark, 742 F.2d 1145, 1149 (9th Cir. 1984) (finding supplemented record of decision that further explained agency's decision not an improper post hoc rationalization).

III. Injunctive Relief – Procedural Matters

A. Temporary Restraining Order ("TRO")

The Court has commented previously on the portion of Plaintiffs' motion requesting a TRO. See Doc. 50 at 3. While Plaintiffs chose to characterize their request for injunctive relief as a motion for TRO and preliminary injunction, Rule 65 of the Federal Rules of Civil Procedure contemplates TROs issuing ex parte and on an expedited basis. Based on the record and timeline of this litigation, there is no legal foundation for issuance of a TRO. As the Court has stated already, "Plaintiffs may be able to establish that they are entitled to injunctive relief, but if an entitlement to such relief is established, it will be in the form of a preliminary or permanent injunction." *Id.* Accordingly, the Court will proceed to the preliminary injunction analysis.

B. Disfavored Injunctions

Before considering the preliminary injunction test, the Court must find that Plaintiffs' requested injunction is not of the three types of injunctions categorically disfavored by the Tenth Circuit. If the requested injunction does indeed fall into one of these categories, it is held to a heightened standard of proof in the subsequent *Winter* analysis. *See O Centro Espirita Beneficente Uniao do Vegetal v. Ashcroft*, 389 F.3d 973, 975 (10th Cir. 2004) (finding that a legally disfavored injunction "must be more closely scrutinized to assure that the exigencies of the case support the granting of a remedy that is extraordinary even in the normal course").

Mandatory Preliminary Injunctions

Plaintiffs' requested preliminary injunction is not in the first category of disfavored injunctions—*mandatory* preliminary injunctions. *See Schrier v. Univ. of Colo.*, 427 F.3d at 1258 (The first category is mandatory preliminary injunctions.) (internal citations and quotations omitted). A mandatory preliminary injunction is one requiring the nonmovant "to act in a particular

way, and as a result ... place[s] the issuing court in a position where it may have to provide ongoing supervision to assure the nonmovant is abiding by the injunction." *Id.* at 1261 (citations omitted). Plaintiffs' Motion seeks relief prohibitory in nature but does not contemplate a mandatory preliminary injunction because it effectively seeks to bar the execution of previously approved APDs, and therefore does not fall into the first category.¹⁵

Preliminary Injunctions that Afford all the Relief that Could be Recovered at Trial

It is difficult to determine at this stage whether Plaintiffs' requested injunction falls into the second disfavored category—"preliminary injunctions that afford the movant all the relief that it could recover at the conclusion of a full trial on the merits." *Schrier v. Univ. of Colo.*, 427 F.3d at 1258 (internal citations and quotations omitted). On one hand, Plaintiff's Motion seeks injunctive relief and Plaintiffs' Merits Brief (Doc. 110) seeks total vacatur of the challenged APDs, which, together, are all Plaintiffs could hope for upon conclusion of a trial. On the other hand, the Motion seeks only to enjoin 255 APDs. Doc. 5 at 1. Since filing the Motion, Plaintiffs have amended several new APDs into the Complaint, and would likely amend newer APDs into the Complaint before trial, so Plaintiffs could conceivably receive an injunction or vacatur of more APDs than they could receive now. The Court has not been made aware of any controlling law addressing this circumstance, but for purposes of analysis in this Memorandum Opinion and Order, the Court will assume that Plaintiffs' requested injunction does not afford all of the relief that *could* be recovered at trial on the merits.

Preliminary Injunctions that Alter the Status Quo

It is also difficult to determine whether Plaintiff's proposed injunction falls into the third disfavored category—"preliminary injunctions that alter the status quo." *Schrier v. Univ. of Colo.*,

¹⁵ This result may be different if the Court did not dismiss the portion of Plaintiffs' proposed injunction seeking a stay of *future* APD grants on jurisdictional grounds. *See* supra Discussion Section I(a).

427 F.3d at 1258 (internal citations and quotations omitted). "Status quo" has been defined as the last "uncontested status between the parties which preceded the controversy[.]" *See Dine I*, at *109 (quoting *Stemple v. Bd. of Educ. of Prince George's Cnty.*, 623 F.2d 893 (4th Cir. 1980). Previously, the Court found in *Dine I* that Plaintiffs' proposed preliminary injunction would not "shut down any already-fracked and presently operating wells, and it thus cannot be said to alter the status quo." *Id.* Now, however, a number of oil and gas wells approved pursuant to the subject APDs have already begun operations. Doc. 44 at 21. Thus, Plaintiffs' proposed remedy may alter the status quo if any ongoing, functional APDs existed before the subject litigation arose. The Court, however, need not probe this issue because, regardless of whether Plaintiffs' requested injunction falls into the second category of disfavored injunctions, Plaintiffs cannot show that they are likely to succeed on the merits in light of BLM's EA Addendum. For purposes of analysis, the Court will address the four prongs of *Winter* as though the proposed preliminary injunction is not the type disfavored under controlling Tenth Circuit precedent.

IV. The Preliminary Injunction Analysis

Plaintiffs must make four showings before the Court may issue a preliminary injunction under Rule 56: (1) that Plaintiffs will suffer irreparable harm unless the injunction issues, (2) that the balance of equities tips in Plaintiffs' favor, (3) that issuance of the injunction is in the public interest, and (4) that there is a substantial likelihood of success on the merits by Plaintiffs. *See Winter*, 555 U.S. at 19. At most, Plaintiffs satisfy only the first of these requirements.

Plaintiffs satisfy the immediate and irreparable harm requirement

Plaintiffs allege that the proposed drilling in the Mancos Shale will result in the following examples of immediate, irreparable harm: (1) damage and permanent destruction of environmental resources from ground disturbance, road-building, drilling, and production; (2) health impacts and

increased concerns over potential health impacts; and (3) "APD development occurring in the absence of environmental review required by NEPA." Doc. 5-1 at 22; *see also* Pl. Exhibit 40 ¶¶ 9–17; Pl. Exhibit 42 ¶¶ 7–14; Pl. Exhibit 44 ¶¶ 8–14; Pl. Exhibit 45 ¶¶ 15–17.

In *Dine I*, the Court found that "Plaintiffs have pointed to a number of ways in which even properly functioning directionally drilled and fracked wells produce environmental harms[,]" *Dine I*, at *153, so for purposes of this analysis, the Court will assume that Plaintiffs have satisfied this prong without making a finding as to whether the alleged harms meet the requirements set forth in *Vill. of Logan v. U.S. Dep't of Interior*, 577 F. App'x 760, 766 (10th Cir. 2014) (finding that to constitute an irreparable harm, a harm must be "certain, great, actual and not theoretical").

As to the thirty-nine (39) wells that are already underway, *see* Doc. 44 at 21, Plaintiffs cannot show that these wells will cause irreparable harm because any ostensible harm the wells may cause has already taken place consistent with a recognition by this Court that environmental damage cannot be undone once a well is in operation. *See Dine I*, at *20, n.9 ("The environmental harms associated with fracking are completed and cannot be undone once a well is fracked. The Plaintiffs would thus prevent no fracking-related environmental harms by shutting down completed wells."). Because satisfaction of *all* four prongs of the preliminary injunction analysis must be satisfied, and because, as to these already-drilled APDs, Plaintiffs have failed to meet their burden, no preliminary injunction may issue as to these 39 APDs or any APDs already in development upon the disposition of Plaintiffs' motion.

Plaintiffs have failed to establish that the balance of harms weighs in their favor

Plaintiffs have failed to convince the Court that their alleged harms outweigh the harms that would be incurred by BLM and its operator-lessees. The balance of equities prong of the *Winter* test requires the Court to determine whether the harms alleged by Plaintiffs outweigh the

harms BLM and the operator-lessees will face if Plaintiffs are granted injunctive relief. Though the Court has assumed that the above-mentioned environmental consequences are immediate and irreparable, Plaintiffs base much of their argument otherwise on the legal harms inherent to BLM's alleged NEPA violations, rather than those harms materially imposed on the environment by the subject APDs.

Plaintiffs also argue that economic harm cannot outweigh environmental impact, referring to textual attenuations in older case law which Plaintiffs allege are dispositive of the issue. Both the Tenth Circuit and the Supreme Court, however, have found that economic harm *can* outweigh environmental harm. *See, e.g., Sierra Club*, 539 F. App'x at 891-92 (The "assertion that injunctive relief cannot be denied based on a weighing of economic harm is mistaken."); *Amoco Prod. Co. v. Village of Gambell*, 480 U.S. 531, 545, 107 S. Ct. 1396, 94 L. Ed. 2d 542 (1987) ("And on the other side of the balance of harms was the fact that the oil company petitioners had committed approximately \$70 million to exploration . . . which they would have lost without chance of recovery had exploration been enjoined."); *Wilderness Workshop v. U.S. Bureau of Land Mgmt.*, 531 F.3d 1220, 1231 (10th Cir. 2008) (finding that the district court did not abuse its discretion according greater weight to the public's interest in gas production and other financial interests than the environmental concerns).

While courts will often accord greater weight to environmental harms *at the outset* of such a balancing inquiry, *see, e.g., Valley Cmty. Pres. Comm'n v. Mineta*, 373 F.3d 1078, 1087 (10th Cir. 2004) (holding "financial concerns alone generally do not outweigh environmental harm"), this does not mean that alleging environmental harms amounts to de facto satisfaction of this prong as Plaintiffs contend.

The Court must therefore weigh Plaintiffs' and Defendants' harms on a scale which, at the very least, *can* tilt in both directions. On one end of the scale, Plaintiffs have alleged certain environmental and health concerns which the Court has assumed are legitimate under the law.¹⁶ On the other end of the scale are Defendant's alleged economic injuries to the local economy, APD operator-lessees, and broadly, federal energy policy and the public interest in local development:

• Local Economy

In 2014, oil and gas production and oil and gas related equipment constituted approximately 22% of the total net taxable value of business activities in San Juan County. Doc. 44, Exhibit A, \P 73. In 2012, such production contributed over \$24 million in ad valorem taxes and \$23 million in county taxes. *Id*.

• APD Operator-Lessees

Enduring Resources Technology has invested \$25 million in a "large-scale water system" for its proposed Mancos Shale Wells, and notably, this investment was made to mitigate many of the alleged water consumption harms underlying Plaintiffs' claims. *See* Campbell Affidavit at 5; *see also* Intervenor Enduring Resources IV, LLC's Response to Plaintiff's Motion for Preliminary Injunction at 11.

The costs of an injunction will equate to \$22,000 per day.¹⁷

Shutting in wells that are already producing can decrease the future production abilities of wells in certain types of formations or reservoirs, Doc. 44, Exhibit A ¶¶ 72, and such impacts increase the longer a well is shut in, id. ¶ 71.

¹⁶ Plaintiffs also contend that the discrete deficiencies found in the APDs of *Dine II* should weigh equally in their favor because the public social and economic interests inherent to the oil and gas drilling in the Mancos Shale are offset by the public interest in "having government officials act in accordance with the law." Doc. 5-1 at 32 (citing *Seattle Audubon Society v. Evans*, 771 F. Supp. 1081, 1096 (W.D. Wash. 1991). But this is not applicable to BLM nor the balance of equities at issue in this case. Plaintiffs here criticize only discrete aspects of BLM's NEPA analysis, and the record evidences that BLM has undertaken significant measures in its NEPA compliance, to include preemptive revision of the record to ensure that Plaintiffs' lawful demands from previous litigation were satisfied. *See* Doc. 44 at 25. At this stage, BLM is compliant with the requirements of NEPA, and a retrospective consideration of a past NEPA-deficiency not present in this case, absent a showing of predetermination, does nothing to prove that BLM is not acting in accordance with the law.

¹⁷ Plaintiffs contend that Enduring Resources Technology's response is untimely under Federal Rule 6(b)(1)(B). However, in light of *Pioneer Investment Services v. Brunswick Associates*, the Court will allow Enduring Resources' response as it is not prejudicial, has little bearing on the proceedings, and was not made in bad faith. 5-7 U.S. 380, 395 (1992).

• Federal Energy Policy

"[T]he . . Basin is currently one of the most prolific sources of natural gas in the country." *Jewell*, 839 F.3d at 1279.

"The development of domestic energy resources is of paramount interest and [such interest] will be harmed (at least to some extent) if that development is delayed." *Nat. Res. Def. Council v. Kempthorne*, 525 F. Supp. 2d 115, 127 (D.D.C. 2007).

The area has collectively produced approximately 200 million barrels of oil, and between 2003 and 2013, oil and gas developments in the region generated \$5.2 billion dollars in federal royalties, nearly half of which was disbursed to New Mexico for education funding. Doc. 44, Exhibit A ¶¶ 22, 80.

• Public Interest in Local Development

In 2018, the New Mexico State Land Office reported \$2.2 million in revenue from oil and gas royalties for public schools, universities and hospitals. *Id.*, Exhibit A, ¶ 73.

Indian allottees with mineral interests rely on royalties for oil and gas development. *Id.* at 27; *see also* Doc. 23, Navajo Allottees' Unopposed Motion to Intervene in Support of Defendants.

All considered, Plaintiffs have failed to show that the balance of equities tips in their favor. Aside from Plaintiffs' speculative claims, the only harms Plaintiffs have demonstrated in any measurable way are the "mundane, certain, day-to-day harms inflicted by drilling[.]" *Dine I*, at *161. Defendants, however, have demonstrated a magnitude of potential loss, both economic and social, and that Plaintiffs refuse to cover Defendants with a bond pending the disposition of this case renders Defendants' potential losses irrecoverable were Defendants to succeed on the ultimate merits. Accordingly, the balance of equities tips in Defendants' favor, and the Court finds that Plaintiffs have not met their burden as to the second *Winter* prong.

Plaintiffs have failed to show that the preliminary injunction is not contrary to public interest

The third *Winter* prong, requiring that the proposed injunction not be averse to the public interest, is particularly interrelated with the second prong here because much of the Court's

balancing of equities was conducted with regard to the injuries an injunction would incur on the public. As stated, local employment in or supporting the petroleum industry, funding for state medical and educational endeavors, and significant amounts of collected taxable income will be materially affected by a preliminary injunction. Alternatively, Plaintiffs have shown, at the very most, that inclusion of new horizontally fracked oil wells in the Mancos Shale will affect them marginally in light of the preexisting—and inevitable—drilling that will occur in the area notwithstanding this litigation. Plaintiffs have therefore failed to make their showing as to the third *Winter* prong.

Plaintiffs have failed to show that they have a substantial likelihood of success on the merits

Finally, the Court arrives to the substantial-likelihood-of-success-at-trial prong of the *Winter* test. Undertaking this analysis under the APA requires the Court to deviate from the traditional substantial-likelihood-of-success analysis because NEPA does not afford Plaintiffs a private right of action. See *Morris v. U.S. Nuclear Reg. Comm'n*, 598 F.3d 677, 690 (10th Cir. 2010). Rather, the complaint here is straightforwardly an appeal, with the Court's review confined by the APA, and thus it does not culminate in a trial as the *Winter* test contemplates. *See Olenhouse v. Commodity Credit Corp.*, 42 F.3d 1560, 1580 (10th Cir. 1994). Unlike litigation that results in a trial, appeals have a closed record, do not impute certain burdens on the parties which are foundational at trial, and the final decisionmaker is the court. *See Dine I*, at *120. Consequently, there is a dearth of case law establishing concrete parameters for the substantial-likelihood-of-success prong in the APA context.

As this Court has found previously, however, "both the closed record, and the fact that the Court will be the ultimate decisionmaker on all issues, move the substantial-likelihood-of-success prong closer to a pure merits decision[,]" *id.*, at *121, and courts in the majority of APA cases

involving a substantial-likelihood-of-success analysis find satisfaction of the prong in the same way that they would render a decision on the ultimate merits, *id.*, at *121-22.

Accordingly, the Court must conduct a plenary review of the administrative record, including the supplemented material, and make a determination as to this prong *on the case's ultimate merits*, overturning BLM's decision only if it is found to be arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law. *See U.S. Bureau of Land Mgmt.*, 531 F.3d at 1224; *see also San Luis Valley*, 657 F. Supp. 2d at 1243 ("Since this is an action pursuant to the APA, the Plaintiffs must ultimately show that the agency's process was arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law. . . An agency decision will be considered arbitrary and capricious if the agency relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise. I conduct a plenary review of the record to determine whether the agency's action was supported by substantial evidence.") (internal quotations and citations omitted). The Court now turns to this review.

V. THE MERITS ANALYSIS

For Plaintiffs to show that they have a substantial likelihood of success on the merits, they must establish that the actions attendant to BLM's proposed drilling of the Mancos Shale were arbitrary and capricious under 5 U.S.C. § 706(2)(A), or that BLM failed to take a hard look at the environmental impact such drilling would impose on the environment under NEPA. The threshold for such a finding is high; BLM must merely have considered the relevant factors and articulated a legitimate connection between its findings and the choice it ultimately made. *See Balt. Gas*, 462 U.S. at 105. In determining whether BLM's decision was "arbitrary or capricious," the Court must

consider whether such decision was based on a consideration of relevant factors and whether a clear error of judgment underlies any lack of due consideration. *See Marsh*, 490 U.S. at 370-71 (citing *Volpe*, 401 U.S. at 416). And while the Court's analysis must be "searching and careful," the "ultimate standard of review is a narrow one." *Id.* BLM must be afforded discretion to rely on reasonable opinions from its own qualified experts, even if the Court might find Plaintiffs' contentions more persuasive. *Id.* Finally, when reviewing *supplemental* NEPA information, the Court must carefully review the record, and "satisfy[itself] that the agency has made a reasoned decision based on its evaluation of the significance—or lack of significance—of the new information." *Id.* at 71.

In such a merits analysis under the APA, Plaintiffs must carry the burden of production, which requires in this context the presentment of a prima facie case that would actually convince a factfinder to find in their favor. *See Dine I*, n.10 (Movant must make "a prima facie case showing a reasonable probability that he will ultimately be entitled to the relief sought.") (citing *Automated Mktg. Sys., Inc. v. Martin*, 467 F.2d 1181, 1183 (10th Cir. 1972); *Crowther v. Seaborg*, 415 F.2d 437, 439 (10th Cir. 1969); *Continental Oil Co. v. Frontier Refining Co.*, 338 F.2d 780, 781 (10th Cir. 1964)). The "substantial likelihood" of a factfinder finding in Plaintiffs' favor is not well-defined and is malleable enough that a showing of the other three *Winter* prongs may affect the Court's conclusion as to the fourth. *See Dine I*, at *117 (finding that movant must present evidence sufficient to survive a motion for directed verdict if raised at trial, and that when deciding how much persuasive evidence to require beyond prima facia showing, a court should "vary its demands based on how strong a showing the plaintiff has made on the other three prongs").

It should also be noted that in spite of the Court's prior admonishment, *see Dine I*, at *112-113, Plaintiffs begin their argument with an incorrect proposition of law as to the strength of the

showing that they must make to satisfy their burden. Plaintiffs claim they are held to a modified preliminary injunction merits standard, citing a portion of a case that, when read outside of its specific context, ostensibly eases Plaintiffs' burden as to this fourth prong. See Doc. 5-1 at 19, n.11 (citing Koerpel v. Heckler, 797 F.2d 858, 867 (10th Cir. 1986) ("the correct test is whether the question presented is so serious, substantial, difficult, or doubtful as to be a fair ground for further litigation.")). In Dine I, Plaintiffs claimed that Davis v. Mineta and Vill. of Logan provided for this lower standard. 302 F.3d at 1111; 577 F. App'x at 766. The Court in *Dine I* then explained to Plaintiffs that Davis stated outright that the lower standard may apply only to the extent a movant has satisfied the other three prongs of the preliminary injunction test, and likely doesn't apply even then. See Dine I, at *112-113 (explaining the difference between the modified and traditional standard) (citing Davis, 302 F.3d at 1111) (internal quotations omitted). Rather than correcting the standard Plaintiffs seek in this subsequent litigation, however, Plaintiffs have merely cited to a new case, Koerpel, which makes the same inapplicable proposition without including the requirement that the other prongs of the preliminary injunction analysis must weigh in movants favor for this lower standard to apply. However, while *Koerpel* does not specifically provide for the limitation requiring movants to have satisfied the other prongs, it does involve a movant who, in fact, satisfied the other prongs, and it does, in fact, mention that the modified test is available for that reason—Koerpel simply fails to state that the test is not applicable absent satisfaction of the other prongs. See 797 F.2d at 866 ("Dr. Koerpel satisfied three of the preliminary injunction requirements . . . In situations where these three criteria have been satisfied, we adopted a modified version of the fourth requirement, the substantial success on the merits test[.]") (internal quotations omitted) (emphasis added). Plaintiffs here deliberately left out this limiting language, and did not show that they satisfy the other prongs—indeed, as in *Dine I*, they still fail at least two of them.

Accordingly, Plaintiffs' are not entitled to proceed under the more lax, modified standard, and they will be held instead to the stricter standard lawfully applicable to movants who fail to show that they satisfy all the other prongs set forth in *Winter*.

Therefore, in order to satisfy the fourth *Winter* prong, Plaintiffs must build a prima facia case demonstrating a reasonable likelihood that, when considered on the merits, they will convince a factfinder that BLM's decision to grant the subject APDs for drilling in the Mancos Shale, **subject to the supplemented administrative record**, was arbitrary and capricious, or that BLM failed to take a hard look at the environmental consequences of its actions. Because Plaintiffs failed to satisfy at least two of the other *Winter* prongs, the Court will vary its demands accordingly, and when appropriate, afford Defendants a degree of deference where factual or legal support is nebulous or uncertain.

A. Impacts to Water Resources

Ignoring those portions of Plaintiffs' argument reliant on a finding that the EA Addendum is not properly before the Court, what remains of Plaintiffs' merits argument as to water resources is as follows: (1) BLM failed to quantify direct water consumption from slick water completed wells and (2) BLM provided no analysis of the impacts that direct or cumulative groundwater consumption would have on water resources. Doc. 110 at 23. As to (1), Plaintiffs argue that because the slick water stimulation technique requires significantly more water than other hydraulic fracturing techniques, BLM did not take the requisite hard look at the *severity* of the adverse effects resulting from the use of larger quantities of water. *See Robertson*, 490 U.S. at 352; *see also* 42 U.S.C. § 4332(C)(ii). In terms of explaining *how* BLM's EA Addendum fails under NEPA, Plaintiffs essentially complain that the EA Addendum's explanation that slick water consumption represents "about 1.3 percent of San Juan Basin 2015 water withdrawals" does not

sufficiently quantify the current status or condition of water resources presently sourced for fracking in the area. As to (2), Plaintiffs allege that BLM does not properly analyze the impacts of groundwater withdrawals for well development on neighboring aquafers. Plaintiffs do admit that BLM analyzed its own water consumption and its reliance on groundwater, and identified the ten major aquifers which may be affected based on a U.S. geological survey, but Plaintiffs assert that BLM needs to state how much water is presently in these aquifers. Doc. 110 at 25.

Slick Water Stimulation

Defendants calculated the impact of the proposed wells based on average water use for horizontal wells in the San Juan Basin regardless of completion or stimulation techniques used. See AR-045068. In making these calculations, BLM used 2018 FracFocus data (proposing a higher total number of slick water wells), instead of the 2018 RFDS estimate (which would result in a lower number), out of a professed concern that the 2018 RFDS would be unsatisfactory to Plaintiffs. In carrying out the calculation in this way, BLM illuminates even higher environmental impacts than are likely to occur. See AR-009411. Plaintiffs, of course, still claim dissatisfaction, but their arguments hold no merit. The metrics employed by BLM quantify an average across all horizontal wells, including those stimulated with slick water. See AR-009426. And BLM went even further. To account for possible increases in slick water stimulation, BLM calculated the impact on water resources assuming that all of the horizontal wells predicted over the next 20 years would be stimulated by slick water, concluding that consequent water consumption would comprise 1.3% of the total water used in the San Juan Basin, AR-45069-71, nothing that would significantly impact water used for other purposes in the area. Id.; AR-045111.

Set forth above is only a very small subset of the total analysis BLM underwent as to slick water, and the Court finds that BLM has clearly considered the implications of slick water

stimulation on water consumption. As the Court has held in the past, the bar is actually considerably lower to satisfy NEPA. *See WildEarth Guardians v. Bernhardt*, 2020 WL 4784821, at *13-14 (D.N.M. Aug. 18, 2020); *see also Citizens for a Healthy Cmty. v. U.S. BLM*, 377 F. Supp. 3d 1223, 1245 (D. Colo. 2019) (holding agency estimates of water quantities needed for oil and gas wells satisfied NEPA, and finding plaintiffs' similar arguments neither compelling nor capable of overcoming the deference owed to federal agencies).

Impacts on Neighboring Aquafers

Plaintiffs' complaint as to impacts on neighboring aquifers suffers the same flaw. The reasoning behind Plaintiffs' complaint is an alleged need for BLM's NEPA documentation to allow third parties to calculate the impact that slick water fracking will have on neighboring aquifers as they relate to the Navajo Nation. As is typical of Plaintiffs' arguments, they cite no authority to this effect—just broad conclusory arguments supporting the well-established axiom that a federal agency must take a hard look at relevant environmental factors, a requirement Plaintiffs have not shown BLM failed to satisfy.

Indeed, BLM assessed the impact of foreseeable water use on groundwater sources and aquifers, its methods for purchasing such water rights, and the aquifers that provide the most groundwater to the area. *See* AR-009398-401; AR-009417; AR-082677. Based on its own agency expertise, having assessed these and many more variables inherent to groundwater use by oil and gas drilling operations, BLM explained that the proposed development is unlikely to affect overlying drinking water aquifers, and based on the layers and the depths at which impacts are expected to occur, no impacts to surface water or freshwater-bearing aquifers are expected to occur from the proposed wells. AR-075629; *see also* AR-045040. Plaintiffs then demand a calculation of the alleged "depletion" of each individual aquifer due to cumulative oil and gas development,

but BLM made clear in its documentation that oil and gas development represents only 2% of water use in the San Juan Basin—as Defendants contend, the calculation requested by Plaintiffs would be worthless, and moreover, impossible to render. AR-045066; AR-009399 (Water may be sourced externally via truck from any number of sources, local or nonlocal); AR-009416 ("[S]ources of water for lease development are also not always known at the APD stage."); AR-045070-71; AR-009400 (some water may also be recycled or produced water, rather than aquifer groundwater); AR-045067 (non-potable water is most likely to be used anyway). Plaintiffs may not be happy that BLM's experts determined that the impact of the proposed drilling on groundwater was not enough to caution against development, but Plaintiffs have not carried their burden of showing that BLM did not give due consideration to relevant factors or environmental consequences that are actually important. *See Marsh*, 490 U.S. at 373; *see also WildEarth Guardians*, 2020 WL 4784821, at *14-15 (deferring to agency analysis and conclusions regarding impacts to aquifers).

Simply stated, the Court is unable to see how these two alleged deficiencies—consideration of slick water and aquifers—relate to BLM's requirements under NEPA. A "hard look" does not require a deep inquiry into every kind of problem that an environmental nonprofit can imagine regarding a proposed development project, *see Dine I*, at *64-65; *see also Balt. Gas*, 462 U.S. at 97; a "hard look" merely requires sufficient consideration of relevant environmental variables. Indeed, the administrative record provides for extensive consideration by BLM as to impacts on water resources, both immediately and cumulatively. Several pages of relevant background and analysis are set forth in the EA Addendum:

- BLM begins its water impact analysis with updated data contained in the 2019 BLM New Mexico Water Support Document, notes the sources from which needed water reserves will be pulled, presents an itemized breakdown on local water use, explains the quantitative impact that BLM's use will have on the total water available for various local purposes, and even notes other sources of non-potable water that may be utilized in slick water stimulation. See AR-045065-68.
- BLM disclosed the factors that determine how much water is derived from local reservoirs, and calculated both cumulative consumption and average water consumption for one well, even assuming all drilling operations were to occur in only one year, thus magnifying in its documentation the environmental consequences the proposed drilling would have on local water supply. *See* AR-045065-71; AR-045066-69; AR-008138; AR-045050.
- Working with multiple estimates, from conservative to wildly liberal, BLM considered cumulative impacts against total water consumption in the San Juan Basin and assessed quantitative impacts on groundwater and the result reductions of groundwater would have on the total local groundwater supply. AR-045066-70; AR-009386.

Accordingly, the Court finds that Plaintiffs have completely failed to establish that BLM did not take a hard look at the impacts on water resources posed by the proposed drilling in the Mancos Shale.

B. Air Quality and Health Impacts

In *Dine II*, the Tenth Circuit found that Plaintiffs failed to carry their burden of demonstrating that BLM acted arbitrarily or capriciously as to its analysis of air quality in its NEPA documentation. *Dine II*, 923 F.3d at 855-56. While much of the Tenth Circuit's reasoning was founded upon an insufficient record, Plaintiffs are incorrect in their assertion that a more complete record necessarily implicates BLM in conduct violative of NEPA. In fact, since *Dine II*, BLM has updated its NEPA documentation with additional analysis derived from the 2018 Air Resources Technical Report, and noted in the administrative record the pollutants inherent to oil and gas development, analyzed nitrogen oxide and organic compound effects on ozone and particulate matter as to their ultimate impact on human health, and set maintenance thresholds for managing

the introduction of such elements to the local environment and human populations. AR-045050; AR-045043-67; AR-032871-79; *see also* Doc. 111 at 31-32. This alone may be enough to show that BLM has taken a hard look—it is clear BLM considered the relevant information in conducting a good-faith assessment of the immediate and cumulative impact that the proposed APDs would have on air quality in the Mancos Shale—but these steps represent only a modicum of BLM's total analyses as to air quality impacts. BLM also analyzed the Air Quality Index and National Air Toxics Assessment models, finding that in spite of Plaintiffs' bemoaned *present* drilling in the Mancos Shale, cancer, neurological and respiratory risks in the area are actually lower than statewide and national levels. AR-045050. BLM even calculated worst-case-scenario cumulative emissions totals under an assumption that *all* of the challenged APDs operate concurrently, which is very unlikely and perhaps impossible. *Id*. BLM then calculated cumulative emissions of the total predicted Mancos Shale wells over the next twenty years when combined with past, present and other reasonably foreseeable future actions, ¹⁸ and concluded that no significant environmental impact would result from the proposed drilling.

Plaintiffs contend that this analysis is not enough—that it does not evidence good faith or a "hard look" because the documentation (1) only quantifies emissions schedules and failed to consider impacts to health, Doc. 110 at 27, (2) characterizes local exposure as a "temporary nuisance," *id.* at 29, and (3) deferred to the National Ambient Air Quality Standards ("NAAQS") rather than the American Lung Association's "ozone rating" score system as to San Juan County between 2012 and 2014, *id.* at 31. This is a misreading of BLM's NEPA documentation.

¹⁸ BLM found that the total number of wells would result in emission increases of only .2% to 1.41% per year depending on the pollutant. AR-045054.

Air Analysis as to Impacts on Health

Plaintiffs' first contention as to BLM's alleged failure to consider air quality impacts is that BLM did not consider the effects of air quality on health. They seem to take issue with the following two findings by BLM: (1) the additional emissions resulting from the challenged APDs "would not be expected to result in any exceedances of the NAAQS or NMAAQS [requirements] for any criteria pollutants in the analysis area, even assuming development of all wells in one year," see Doc. 111 at 32; Doc. 111, Exhibit A; and (2) the potential additional emissions would not be expected to increase the number of days in the area with an unhealthy Air Quality Index. Id. In arguing that these findings do not indicate sufficient consideration of the drilling's potential impact on health, it appears that Plaintiffs would have the Court ignore that the NAAQS and Air Quality Index ("AQI") standards measure the *impacts* of air pollutants on human health, ¹⁹ as well as the abundant legal precedent establishing that BLM's methodology satisfies its NEPA requirements as to the impact of emissions on human health. See, e.g., Hillsdale, 702 F.3d at 1175; Sierra Club v. Fed. Energy Regulatory Comm'n, 867 F.3d 1357, 1370 n.7 (D.C. Cir. 2017) ("FERC appropriately relied on EPA's national ambient air quality standards (NAAQS) as a standard of comparison for air-quality impacts. By presenting the project's expected emissions levels and the NAAQS standards side-by-side, the EIS enabled decisionmakers and the public to meaningfully evaluate the project's air-pollution effects by reference to a generally accepted standard."); Citizens for a Healthy Cmty., 377 F. Supp. 3d at 1243-44 ("Defendants [using NAAQS and CARMMS] explained their decision and stated they would update their information if they deemed it necessary. With the deference I must afford to Defendants, I find that they took a sufficiently hard

¹⁹ See AR-045043 (The Clean Air Act requires the NAAQS to be set "for pollutants considered harmful to public health and the environment."); AR-045102-03 (The AQI "translate[s] daily air quality into a tiered, color coded system that helps people understand how clean the outdoor air is, who may be affected if pollutant levels are higher than desired, and when they may want to take measures to protect their own health.").

look at the Projects' cumulative impacts to air quality."); WildEarth Guardians, 2020 WL 4784821, at *13; Amigos Bravos v. U.S. Bureau of Land Management, 2011 WL 7701433, at *12; Sierra Club v. Fed. Highway Admin., No. 17-CV-1661-WJM-MEH, 2018 WL 1610304, at *7 (D. Colo. Apr. 3, 2018) ("[T]he case law is nearly unanimous that federal agencies may rely on NAAQS compliance to conclude that human health will not be seriously affected by a transportation project."); Cmtys. Against Runway Expansion, Inc. v. FAA, 355 F.3d 678, 689 (D.C. Cir. 2004) (explaining that in an environmental analysis, the agency's "choice among reasonable analytical methodologies is entitled to deference"). By incorporating NAAQS and AQI standards into its NEPA analysis, BLM not only showed that it considered quantified cumulative air emissions and health impacts in the area, but tested such figures against accepted methodological surveys.

Plaintiffs cite to various sources attempting to create a kind of portfolio of possible inadequacies with this process, one which if accepted out of the context of these cases would essentially render agency action impossible. In so doing, Plaintiffs diminish the contents of BLM's NEPA documentation as to air and health impacts in order to make the already questionable case references seem applicable to BLM's conduct. For instance, Plaintiffs characterize BLMs conclusion as to cumulative air quality impacts as "generalized," and then claim that it is therefore violative of a Ninth Circuit finding in *Kern v. Bureau of Land Mgmt.*, which found that "general" statements about "possible" effects do not constitute a "hard look" absent justification. 284 F.3d 1062, 1075 (9th Cir. 2002). Of course, though presented as if somehow dispositive of Plaintiffs' claims, the applicability of BLM's NEPA documentation is subject to Plaintiffs' subjective determination of "general"—that because they don't like the proposed drilling project in the Mancos Shale, BLM's decision must be overly "general" under *Kern*, and therefore should be

vacated in spite of a thorough record evidencing that BLM's analysis was anything but general. In another example, Plaintiffs contend that BLM's EA Addendum is not "actual" enough—that while it may have analyzed cumulative impacts, it did not analyze the "incremental impact" that the subject APDs will have on the climate broadly under another Ninth Circuit decision, *Biological Diversity v. Nat'l Highway Traffic Safety Admin.* 538 F.3d 1172, 1216 (9th Cir. 2008). It is difficult to know what concrete parameters Plaintiffs attach to phrases like "actual" and "general" because Plaintiffs offer nothing of any legal value in defining the terminology of their complaints and the caselaw they cite is largely inapplicable to BLM's extensive, good-faith efforts to satisfy NEPA.

Plaintiffs' entire sequence of argumentation takes this approach: finding a case whereby an agency action was found arbitrary or capricious, locating certain qualifiers such as "general" or "non-cumulative" within a line of the case, and then insisting with no legitimate support that BLM's NEPA documentation objectively falls within these broad and subjective qualifiers. It would be wasteful of judicial resources to address these arguments in an itemized way, ²⁰ but going down the list, every appeal to precedent that Plaintiffs make in these arguments suffers the same type of argumentative flimsiness.

The Court accordingly finds that by any estimation, BLM's EA Addendum as to air quality and local health encapsulates those elements required under NEPA. The EA Addendum *does*, *inter alia*, engage in cumulative assessments, takes a comparative look at other generators of emissions in the San Juan Basin, employs court-accepted methodologies in presenting the long and short-term environmental consequences of the proposed and foreseeable oil wells, and ultimately concludes that probable (and possible) emissions contributions by BLM would not have a material impact on the local environment warranting anything beyond a FONSI. *See* AR-045043-54; AR-

²⁰ See CTS Corp. v. EPA, 759 F.3d 52, 64, 411 U.S. App. D.C. 243 (D.C. Cir. 2014) (explaining that courts need not address cursory arguments).

032868-80. Now Plaintiffs demand that such impacts are explained in "degrees," that the analyses be less "general" (though they must remain "cumulative") and make less statements about "possible effects." *See* Doc. 110 at 27-28. None of these alleged deficiencies, however, indicate any "clear error of judgment" under *Marsh*, or, in this context and in light of the extensive analysis set forth in the EA Addendum, that BLM failed to "consider the relevant factors and articulate[] a legitimate connection between its findings and the choice it ultimately made" under *Balt. Gas*, 462 U.S. at 105; 490 U.S. at 370-71.

"Temporary Nuisance"

Plaintiffs' next contention is that BLM offensively refers to exposures to air pollutants as a "temporary nuisance." Doc. 110 at 29. This, Plaintiffs claim, satisfies their burden of demonstrating that BLM acted arbitrarily because it is contrary to "scientific understanding." *Id*.

As before, this argument requires the Court to ignore relevant precedent, namely, that federal agencies must be afforded discretion to rely on reasonable opinions from their own qualified experts. *See Marsh*, 490 U.S. at 370-71. Furthermore, Plaintiffs present BLMs conclusion as though it is contrary to other sources, though in reality, it simply did not mention certain sources which Plaintiffs wish had been incorporated.

As Defendants point out, it appears the true issue here is that Plaintiffs were offended by "BLM's use of the term 'temporary nuisance," not any actual failures under NEPA. *See* Doc. 111 at 34. This is because Plaintiffs' entire legal argument here is either contrived or confused. Plaintiffs allege that BLM disclosed only annual emissions, rather than emissions over the full life of the wells. Doc. 110 at 36. This allegation of Plaintiffs' is patently false. BLM determined that the exposure of pollutants was a "temporary nuisance" because it analyzed the timeline of construction, and finding that most emissions occur during the construction, completion and

reclamation phases of development, the window of highest pollution exposure was relatively short-term. *See* AR-045052. Accordingly, BLM presented its analysis on short-term effects, but did not forego a cumulative analysis to do so.

Tables 8 and 10 of the EA Addendum (below) show emissions estimates for the entire lifecycle of the wells covered by the subject APDs, including "construction, operations, maintenance, and reclamation." AR-045051; AR-045094 (explaining that Table 8 "discloses the impacts from the wells over their assumed 20-year lifespan, consistent with the 2018 RFD"); AR045095 ("[T]he total impacts for the lifespan of the wells is projected through the impacts included in Chapter 3 for all resources analyzed.").

Table 8.

		APD Emissions (tons per year)						
	PM10	PM2.5	NOx	SO2	CO	VOC		
Human-caused emissions (San Juan, Sandoval, Rio Arriba, and McKinley Counties)	118,725	18,899	70,255	6,602	166,934	93,763		
One-well emissions	5.31	0.82	6.01	0.11	2.55	1.17†		
Total emissions from APDs (370 wells)*	1,964.7	303.4	2,223.7	40.7	943.5	432.9 †		
Percent increase	1.65%	1.61%	3.16%	0.62%	0.57%	0.46%		

^{*} The representative well used to calculate emissions is a horizontal oil well. Emissions for vertical wells were not used from this analysis due to current predominance in horizontal technological drilling methods and because presenting horizontal oil well emissions estimates represents a more conservative summary of emissions, compared with emissions from a vertical well, with the exception of SO2, which could be 4 to 5 times greater in a vertical well scenario. However, sulfur dioxide emissions are still estimated to be within the same magnitude and less than 1 ton per year of SO2 emissions per well.

AR-045051.

[†] VOC emissions at the operational phase represent a 95% control efficiency and estimate potential emissions representing the contribution for "one oil well" from the emissions at storage tanks, gathering facilities, etc.

Table 10.

	APD Emissions (tons per year)								
	PM10	PM2.5	NOx	SO2	CO	VOC			
Human-caused emissions	118,725	18,899	70,255	6,602	166,934	93,763			
(San Juan, Sandoval, Rio Arriba, and McKinley									
Counties)									
Total emissions from APDs (370	1,964.7	303.4	2,223.8	40.7	943.5	432.9 †			
wells)*									
Percent increase	1.65%	1.61%	3.16%	0.62%	0.57%	0.46%			
Total annual emissions from 2020	525.69	80.19	612.81	10.89	260.37	115.53			
reasonably foreseeable federal well									
development (99 wells)									
Percent increase	0.44%	0.42%	0.87%	0.16%	0.16%	0.12%			
Total annual emissions from 2020 reasonably	849.60	129.60	990.40	17.60	420.80	187.72			
foreseeable federal and non- federal well									
development (160 wells)									
Percent increase	0.72%	0.69%	1.41%	0.27%	0.25%	0.20%			

^{*} The representative well used to calculate emissions is a horizontal oil well. Emissions for vertical wells were not used from this analysis due to current predominance in horizontal technological drilling methods and because presenting horizontal oil wells emissions estimates represents a more conservative summary of emissions, compared with emissions from a vertical well, with the exception of SO2, which could be 4 to 5 times greater in a vertical well scenario. However, sulfur dioxide emissions are still estimated to be within the same magnitude and less than 1 ton per year of SO2 emissions per well

AR-045053.

Analyzing the emissions of the proposed drilling against the collective figures in Table 8, and acknowledging that emissions are front-loaded, that is, most acute during initial construction, BLM determined that incremental additions would not exceed accepted guidelines for criteria pollutants. AR-045051. BLM then assessed in Table 10 its incremental contributions in light of overarching human-caused emissions, determining that such additions would represent only a cumulative 1.41% increase and not exceed NAAQS thresholds or increase the number of days affecting "sensitive" groups in the area, and even discussing measures and best management practices BLM requires of its operator-lessees to mitigate this already low figure. AR-045054.

BLM also referred to calculations set forth in the Air Resources Technical Report, which account for lifecycle requirements of wells in the San Juan Basin and include values for construction, completion, interim reclamation, annual operations and final reclamation. AR-

[†] VOC emissions at the operational phase represent a 95% control efficiency and estimates potential emissions representing the contribution for "one oil well" from the emissions at storage tanks, gathering facilities, etc.

032897; AR-045050. These tables are particularly useful because, as Defendants state, they "express the total emissions during all phases of development as annual emissions consistent with the widely accepted practice of providing air pollutant data in the form of annual concentrations or tons per year." AR-032870 (EPA reports air pollution data as "annual average concentrations" and "tons per year.") Further, because the tables express emissions as annual totals, it provides "for comparison with EPA and state metrics . . [and] accounts for the fact that BLM cannot predict the lifespan of a given well." Doc. 111 at 35.

Plaintiffs appear to be questioning BLM's methodological choice in presenting data. Again, Plaintiffs effectively demand that BLM do math for them, as the tables allow any third party to calculate total emissions over a well's *potential* lifespan on their own. Regardless, BLM's finding that the most serious air quality impacts are largely temporary nuisances is not "arbitrary," as Plaintiffs allege. BLM's conduct is, in fact, quite satisfactory under the rubric of *Olenhouse*, which sets forth the standard for determining whether an agency's decision was arbitrary or capricious. (1) BLM did not rely on factors not meant to be considered, (2) BLM did not "fail entirely" to consider important aspects of an alleged problem, and, in fact, clearly considered both short and long-term exposures to pollution, notwithstanding Plaintiffs' dissatisfaction with a seemingly accurate presentation; (3) BLM did not offer explanations for its conclusion contrary to the evidence, and, rather, presented such evidence wholesale; and, (4) BLM's choice of words, much less its agency decision, is certainly not so implausible that it cannot be ascribed to a difference in view. *Olenhouse*, 42 F.3d at 1574-75 (citing *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Ins. Co.*, 463 U.S. 29, 43, 77 L. Ed. 2d 443, 103 S. Ct. 2856 (1983)).

Accordingly, Plaintiffs have failed to demonstrate that BLM's conduct exhibits clear error.

The Court defers to BLM's expertise as to the technical and scientific presentment of cumulative

and short-term data and conclusions drawn from such data, and finds that BLM's captioning of certain air pollution exposure as a "temporary nuisance" is not arbitrary. *See Wild Watershed v. Hurlocker*, 961 F.3d 1119, 1132 (10th Cir. 2020) (deferring to agency's technical and scientific decisions; noting issue is not whether the agency's choice is the "best approach," but rather whether it was a "clear error").

Incorporating the NAAOS over the American Lung Association's "ozone rating"

Plaintiffs next contend that even if ozone levels in the San Juan Basin have not exceeded cautionary thresholds set forth in NAAQS, they are still "dangerously high" based on the American Lung Association's ozone rating system from 2012 to 2014,²¹ and that BLM used NAAQS compliance as an excuse to engage in only a surface-level analysis of important health risks to the exclusion of an alternative publication. Plaintiffs' argument is more-or-less a recitation of its argument that BLM should not have relied on the AQI and the NAAQS when considering potential impacts as to local health, but here, rather than arguing against the use of the NAAQS generally, Plaintiffs argue that because another sort of study exists as to ozone pollution (the American Lung Association's "F rating" for ozone), any findings based on NAAQS criteria violates principles of "environmental justice" because other "reasonably available" information must be analyzed. *See* AR-043620, Executive Order 12898 and NEPA, Guidance Under the National Environmental Policy Act, Council on Environmental Quality (Dec. 10, 1997).

Plaintiffs' argument warrants little discussion. Plaintiffs located language in the text of an "environmental justice" guidance promulgated by the Council on Environmental Quality in 1997,

²¹ Between 2012 and 2014, the American Lung Association gave San Juan County an "F rating" for ozone pollution. *See* AR-044943 As Defendants point out, Plaintiffs demonstrate conclusory and cherry-picked information. Doc. 111 at 37. Indeed, the same study by the American Lung Association awarded Sandoval County, another county near the drilling areas in the San Juan Basin an "A" rating for ozone pollution, and further alleges that San Juan County is, in fact, very clean with respect to other forms of pollution, finding that San Juan County is among the "cleanest counties" for particle pollution. *See* AR-044943; AR-044834; AR-044851.

and then located one of the countless studies involving San Juan County—the American Lung Association's ozone rating—and claim that by virtue of this study's absence from BLM's analysis the entire analysis fails under NEPA. To bolster this argument, Plaintiffs focus on "sensitive" groups which may be inordinately affected by BLM's alleged failure to consider information beyond the NAAQS.

However, none of the cases cited by Plaintiffs make a finding that the existence of studies by nonprofits is dispositive of a lack of due consideration on the part of a federal agency; each case's finding is qualified with factual circumstances not applicable to BLM's conduct and is useful only insofar as it reinforces the NEPA standards to which BLM has already clearly acknowledged it is bound.²² Plaintiffs offer nothing substantive to undermine BLM's NEPA analysis nor its decision, and BLM's documentation actually demonstrates thorough consideration of air impact on both local health and the environment. For instance, BLM identified ozone as an area of concern, and incorporated into its review information on areas with increasing O3 levels. Next, BLM considered New Mexico's new "Ozone Attainment Initiative" and analyzed NOx (nitrogen oxides) and VOC (volatile organic compound) emissions from the challenged APDs and

²² See, e.g., WildEarth Guardians v. OSMRE, 104 F.Supp.3d 1208, 1227-28 (D. Colo. 2015); Edwardsen v. U.S. Dept. of Interior, 268 F.3d 781, 789 (9th Cir. 2001); Motor Vehicle Mfrs., 463 U.S. at 43; Bernhardt, 2020 WL 4001480, at *35; Standing Rock Sioux Tribe v. U.S. Army Corps of Eng'rs, 440 F. Supp. 3d 1, 9 (D.D.C. 2020). These cases are presented as though they have any bearing on Plaintiffs' arguments here, but each merely restates an axiom Plaintiffs insist BLM has disregarded absent any evidence that it does—that satisfactory consideration of relevant environmental variables must be present in a federal agency's decision. Furthermore, WildEarth Guardians' applicability is misstated by the Plaintiffs; that case concerned authority to consider air impact under NEPA, not whether NAAQS is appropriate for incorporation into a NEPA analysis. 104 F. Supp. 3d at 1227-28; see Sierra Club, 2018 WL 1610304, at *7-8 (noting WildEarth Guardians v. OSMRE is the "only potential exception" to the "nearly unanimous" rule that "federal agencies may rely on NAAQS compliance" to assess health impacts and refusing to give decision any weight because that court "was not presented, and did not decide" "whether agencies can rely on NAAQS to satisfy their NEPA obligation to evaluate air pollution's impact on human health"). Plaintiffs also omitted key text from its recitation of Edwardsen v. U.S. Department of the Interior. Specifically, Plaintiffs cite the following language: "the fact that the area will remain in compliance with the NAAOS is not particularly meaningful..." Doc. 110 at 32. However, the full language reads as follows: "the fact that the area will remain in compliance with the NAAQS is not particularly meaningful, because the ambient air quality in the area presently exceeds NAAQS standards." 268 F.3d at 789 (emphasis represents Plaintiffs' omission). There is no question that Plaintiffs read this omitted text, as it is part of the same sentence Plaintiffs use to support an unsupported position.

from the cumulative foreseeable wells, ultimately concluding that such emissions are "anticipated to be too small in quantity to result in exceedances of O3 in the analysis area." AR-045052-54; *see San Juan Citizens*, 326 F. Supp. 3d at 1251 (upholding air analysis when BLM concluded that "[t]he potential amounts of ozone precursor emissions of NOx and VOCs from the proposed lease sale are not expected to impact the current design value for ozone in San Juan County"). This is only a small portion of the variables considered as to ozone impacts in the EA Addendum and the administrative record by and large.

The Court is not in a position, nor is it the Court's job, to undergo its own scientific analysis as to the merit of BLM's conclusion; however, it is the Court's job to determine from the record whether BLM considered all the relevant factors and articulated a legitimate connection between the facts found pursuant to its research and the choices it ultimately made. See Balt. Gas, 462 U.S. at 105. NEPA does not require an agency to discuss all potential environmental impacts in great detail, nor does it require an agency to elevate environmental concerns over its other considerations, Dine I, at *64-65; Balt. Gas, 462 U.S. at 97, it merely requires sufficient consideration of important environmental variables. The EA Addendum satisfies these requirements, and appears in many respects to exceed them. See WildEarth Guardians, 2020 WL 4784821, at *11-13 (rejecting similar arguments challenging BLM's similar approach to analyzing ozone impacts); Amigos Bravos, 2011 WL 7701433, at *12-14 (upholding BLM's air analysis, noting BLM's consideration that "ozone levels in the San Juan Basin were again close to exceeding the NAAQS" but took a hard look at all relevant factors). Accordingly, the Court finds that the inclusion of NAAQS thresholds into BLM's analysis was not improper, and that Plaintiffs have not carried their burden of demonstrating that BLM failed to consider the relevant factors required under NEPA as to the impact on air pollutants on the environment and local health.

VI. GHG Emissions

Plaintiffs argument as to greenhouse gas ("GHG") emissions differs from their other positions solely in its focus on the alleged "climate change" that will result from BLM's proposed drilling operations in the Mancos Shale, rather than discrete localized impacts. The majority of the arguments articulated here again turn on Plaintiffs' claim that BLM predetermined its initial decision to undergo drilling and that the EA Addendum should therefore be omitted from the Court's analysis. For the reasons set forth in Discussion Section II, these arguments are devoid of any merit.

As to Plaintiffs' surviving arguments, Plaintiffs claim the following: (1) BLM merely quantified GHG emissions, and this is insufficient to form a basis for informed decisionmaking, (2) BLM erroneously minimized the magnitude of GHG emissions, (3) BLM did not consider environmental impacts on a non-local scale and (4) BLM failed to evaluate GHG emissions in the specific context of "carbon budgets."

GHG Quantification

First, Plaintiffs' claim that BLM merely quantified GHG emissions instead of appropriately analyzing such quantities is a recitation of Plaintiffs' quantification arguments as to water resource consumption and air pollution.²³ Thus, the Court will not restate its previous analyses, but notes that even Plaintiffs' Merits Brief demonstrates that BLM did more than merely quantify GHG emissions.²⁴ As is evident in Plaintiffs' Merits Brief and in the record, BLM used the probable quantities of GHG emissions to create a long-term model and to analyze the impact possible GHG

²³ See supra Discussion Section V(A) & (B).

²⁴ See Doc. 110 at 35 (noting that BLM acknowledged the primary GHGs associated with the oil and gas industry, explained methane's relative "radiative forcing" compared to carbon dioxide, and calculated a methane's warming potential with a 100-year model).

emissions could have. This is far more than mere quantification of GHG emissions, and Plaintiffs' argument is without merit.

The 100-year GHG Schedule

Second, Plaintiffs' claim that BLM erroneously minimized the magnitude of emissions begins with an assertion that BLM should have defined how it quantified GHG emissions in the EA Addendum, speculating that BLM did not appropriately distinguish its methane figures from other GHG emissions in the cumulative GHG analysis because the EA Addendum merely specified that the primary GHGs associated with oil and gas are CO2 and methane. Doc. 110 at 35-36. Plaintiffs seem to imply that because methane may have more significant near-term environmental effects, BLM's statement as to CO2 and methane are falsified or inconsistent. This argument makes little sense, but might be better understood in light of Plaintiffs' subsequent argument. According to Plaintiffs, methane has a shorter atmospheric lifetime than CO2, and thus, methane causes greater "near-term" environmental damage. Plaintiffs assert that this difference in lifetimes renders BLM's 100-year analysis as to the environmental effects of gas emissions worthless, as Plaintiffs maintain a 20-year analysis is more appropriate. The rationale behind this argument is difficult to understand, but the best the Court can deduce is that a 20-year environmental impact analysis would appear to a layman more dramatic than the 100-year analysis because the methane emissions included in such analysis will be more pronounced during this period. Plaintiffs conclude that BLM's failure to present a 20-year emissions schedule fails under 40 C.F.R. § 1502.1 because it is not a "full and fair discussion of significant environmental impacts," and fails under 40 C.F.R. § 1500.1(b) because it is not "accurate scientific analysis." Plaintiffs' cumulative argument then is that presenting a 100-year emissions schedule when a 20-year schedule would look worse to the public was unfair and does not represent "accurate science." This argument is

absurd, as it would require the Court to afford Plaintiffs' marketing opinions preeminence over BLM's technical determinations which is contrary to law.

BLM explains that the requested 20-year emissions schedule is known as a 20-year GWP. Doc. 111 at 41. The 20-year GWP was disclosed in BLM's 2018 Air Resources Technical Report and the 2019 GHG White Paper incorporated into BLM's analysis. AR-045055-56; AR-009436-42. While BLM disclosed both the lifetime and relative potency of methane, it states that it chose to list the 100-year emissions schedule in the EA Addendum since the majority of emissions impacts "derived from climate models are expressed toward the end of the century[.]" AR045094. The Court notes that official GHG emission estimates for the United States are reported in the form of a 100-year analysis. AR045094, AR045056, AR045060, AR045094. Based on this fact alone, the Court finds that BLM's decision to present the 100-year time horizon does not misrepresent or diminish the impact of its environmental conclusions, and is consistent with the law and other similar federal emissions practices. *Hillsdale*, 702 F.3d at 1178 ("An agency has discretion to choose a methodology, so long as it explains why it is reliable."); *Wilderness Workshop*, 342 F. Supp. 3d at 1160-61 (rejecting the same argument as to BLM's chosen time horizon for GWPs). ²⁶

²⁵ GWP is a metric for "the relative and absolute contributions" of different GHGs, rendered by comparing "the heat absorbing ability of a certain mass of a gas relative to the same mass of carbon dioxide." AR-032918; AR-009441-42.

²⁶ Plaintiffs' only case reference in support of its argument that is not contrived or decontextualized is *W. Org. of Res. Councils v. U.S. BLM.* Therein, the court found that BLM should have explained its decision to use a 100-year emissions schedule in response to comments specifically critical of the choice to use the longer time horizon. 2018 WL 1475470, at *15 (D. Mont. Mar. 26, 2018) (finding BLM failed to respond to criticisms of its methodology raised during the comment period). Here, BLM *did* explain the choice and disclosed both the 100 and 20-year GWPs. Moreover, the present case concerns inclusion of the 100-year schedule in a NEPA analysis, not a lack of responsiveness to protests made during the NEPA mandated comment period.

"Indifference toward climate change"

Plaintiffs' third argument as to BLM's GHG emissions analysis under NEPA is that BLM "merely catalogue[d]" its projects in the area in contravention of WildEarth Guardians v. Bureau of Land Mgmt., 2020 WL 2104760, at *9 (D. Mont. May 1, 2020), and BLM should have explored the "ecological[,]... economic, [and] social" impacts of those emissions, including an assessment of their "significance." 40 C.F.R. §§ 1508.8(b), 1502.16(a)-(b). Specifically, Plaintiffs claim that BLM should have "connect[ed] the dots" as to cumulative emissions, and the fact that they didn't do so is indicative of "indifference" toward climate change. Doc. 110 at 40.27 Plaintiffs further allege that even if the individual impacts of developing oil wells in the Mancos Shale are minimal, these impacts "may" nonetheless be significant "when added to the impacts of existing future federal oil and gas wells." Doc. 110 at 40 (citing WildEarth Guardians, 368 F. Supp. 3d at 77). Importantly, where Plaintiffs thus far have argued that BLM's NEPA documentation does not sufficiently consider the cumulative impact of its drilling on the Mancos Shale, Plaintiffs now assert that BLM failed to consider the incremental contributions from the proposed drilling to total emissions from all federal oil drilling nationwide. Doc. 110 at 41. According to Plaintiffs, BLM should have committed a portion of its NEPA documentation to articulating broadly the "magnitude of the threat posed by climate change." *Id*. The Court is unsure why, as (1) BLM seems to have done this analysis, and (2) Plaintiffs' request has no bearing on the generally broad and deferential NEPA requirements for federal action. Instead, Plaintiffs request that the Court require

²⁷ Plaintiffs also contend that BLM's "indifference" towards climate change is exemplified by the following two conclusions set forth in the EA Addendum. (1) "[F]oreseeable Greenhouse Gas (GHG) emissions of the original Proposed Action, when compared to the reasonably foreseeable past, present, and future potential emissions of the state and nation as well as the foreseeable downstream GHG emissions, will incrementally contribute to global GHG emissions with de minimis impacts to cumulative GHG emissions." AR-045300. (2) "The very small increase in GHG emissions that could result from implementing the proposed alternative would not produce climate change impacts that differ from the No Action Alternative." AR-065844. It is unclear why Plaintiffs believe these statements indicate "indifference," or how the statements relate to their argument at all other than reinforcing that BLM made its agency decision based on the very cumulative figures that Plaintiffs initially allege are absent from BLM's consideration.

an agency to codify Plaintiffs' beliefs about climate change and its origins in federal oil drilling in the agency's NEPA documentation. Equally curious is Plaintiffs' conclusion that "no combination of documentation BLM offers has satisfied [its] duty, in violation of NEPA." This statement is proffered by Plaintiffs with virtually no explanation or support in the record.

BLM's compliance with NEPA as to emissions is actually supported by the record and applicable caselaw, and sets out the type of broad climate information Plaintiffs demand. Moreover, BLM's obligation under NEPA is not to tell the public about the global climate, but rather to assess the impact and significance of its GHG emissions based, in part, on the present status of the climate. See 40 C.F.R. §§ 1508.8(b), 1502.16(a)-(b). Moreover, BLM extensively presented details on both the global and local climate in analyzing the impact that its proposed wells would have. See, e.g., AR-045056; AR-045060; AR-009439-40. Ultimately, BLM calculated that construction and operation of the proposed wells would increase emissions by .00076%, AR-045059, that total lifetime emissions, including downstream emissions, would represent .48% of total emissions, id.; AR-045061, and that annual cumulative emissions from all of the foreseeable wells would account for .23% to .44% of total emissions from all sources, id.; AR-045064. In addition to this analysis as to the cumulative potential impact of federal drilling on the environment, BLM acknowledged that the technical details underlying calculations of global emissions make it very difficult, or even impossible, to calculate the isolated effects of the proposed drilling on global climate models and forecasts, as Plaintiffs demand.²⁸ BLM nonetheless

²⁸ BLM explained that when "information is lacking," "[t]he incremental contribution to global GHGs from a proposed land management action cannot be accurately translated into effects on climate change globally or in the area of any site-specific action" and "[c]urrently, global climate models are unable to forecast local or regional effects on resources." AR-045055; see also AR-045104 ("Due to the current available science regarding the anticipated climate related impacts associated with GHGs and the relative unknown nature of how these impacts can impact localized communities, the BLM cannot make a reasoned, meaningful analysis that includes scientific conclusions regarding impacts to human health, based on what is known regarding the current exposures."); AR-032916; AR-032892-93; AR-032896 (discussing limitations and uncertainties in predicting climate impacts). Courts recognize the limits of

concluded, based on its own technical expertise, that potential emissions from the proposed drilling, both as to individual wells and collectively, "will incrementally contribute to global GHG emissions with de minimis impacts to cumulative GHG emissions." This approach is quite consistent with what Plaintiffs claim to want from BLM, and is consistent with what the law requires. See, e.g., WildEarth Guardians, 2020 WL 4784821, at *9-10; WildEarth Guardians v. Jewell, 2017 WL 3442922, at *12 (D.N.M. Feb. 16, 2017); WildEarth Guardians v. Zinke, 2019 WL 2404860, at *10 (D. Mont. Feb. 11, 2019); WildEarth Guardians v. Jewell, 738 F.3d 298, 310 (D.C. Cir. 2013); Citizens for a Healthy Cmty., 377 F. Supp. 3d at 1238-39; Barnes v. U.S. Dep't of Transp., 655 F.3d 1124, 1139 (9th Cir. 2011) (all upholding similar approaches to contextualizing emissions at local and national levels and concluding that the potential emissions impact is minimal). Accordingly, the Court finds that Plaintiffs have failed to establish that BLM did not consider the cumulative impacts of the proposed wells on broader GHG emissions in the environment.

"Carbon Budgets"

Finally, Plaintiffs allege that BLM failed to evaluate GHG emissions in the context of carbon budgets. This is another example of Plaintiffs specifying increasingly discrete factors with no real relevance to the broad requirements to which BLM is actually bound. As not to belabor this discussion, the Court notes that Plaintiffs only cite to cases that, again, generally require an agency to consider the impact of its proposed action. Buried among these cases is Plaintiffs' allegation that BLM must consider its GHG emissions in the context of so-called "carbon"

climate models and uphold NEPA analyses under these conditions. *See, e.g., WildEarth Guardians*, 738 F.3d at 309 (finding that plaintiffs complaints as to the speculative nature of imputing figures onto statewide emissions were "of the flyspecking variety"); *WildEarth Guardians v. U.S. Forest Serv.*, 828 F. Supp. 2d 1223, 1240 (D. Colo. 2011) (finding for federal agency because non-profit plaintiff could not identify any method that would enable the agency to describe with any particularity how the project would contribute to the global climate); *Citizens for a Healthy Cmty.*, 377 F. Supp. 3d at 1239; *WildEarth Guardians v. Zinke*, 368 F. Supp. 3d 41, 79 (D.D.C. 2019).

budgets."²⁹ However, none of the cases cited by Plaintiffs mandate such a particularized approach and the Court is not aware of any case authority requiring this approach. The lack of a carbon budget analysis is just one example of the infinite number of items BLM did not include explicitly in its EA Addendum which Plaintiffs have now used to fabricate a broad argument that BLM violated NEPA. The law, in fact, wholly undermines Plaintiffs' claims. *See WildEarth Guardians*, 368 F. Supp. 3d at 79 (BLM is not required to use carbon budgeting because, "it is within the expertise and discretion of the agency to determine the methodologies underlying those analyses.") (internal quotations omitted); *W. Org. of Res. Councils*, 2018 WL 1475470, at *14 ("Plaintiffs identify no case, and the Court has discovered none, that supports the assertion that NEPA requires the agency to use a global carbon budget analysis."); *California v. Bernhardt*, No. 4:18-CV-05712-YGR, 2020 WL 4001480, at *37 & n.43 (N.D. Cal. July 15, 2020) (on appeal) (refusing to find that use of carbon budgeting was required).³⁰

Thus, BLM clearly does not need to evaluate its published emissions in terms of carbon budgets, as federal agencies are granted ample discretion in choosing methodologies which present information or underly its analyses. *See WildEarth Guardians*, 368 F. Supp. 3d at 79. A new invention of measure, entirely unsupported by the law but articulated by litigants with paragraph after paragraph of ostensible justification, will not change this legal truth. In fact, *all* of Plaintiffs'

²⁹ Carbon budgets are a metric allegedly monitoring total GHG thresholds worldwide. *See W. Org. of Res. Councils*, 2018 WL 1475470, at *14.

³⁰ On its roster of litigations, Plaintiffs and similar environmental non-profits initially used another discrete metric in attempts to allege NEPA violations, the so-called "social cost of carbon" metric. This was also unsuccessful in the courts. *See, e.g., Wildearth Guardians*, 2020 WL 4784821, at *10-11 ("BLM was not required to apply the Social Cost of Carbon Protocol in evaluating the three lease sales."); *WildEarth Guardians*, 368 F. Supp. 3d at 78-79; *Wilderness Workshop*, 342 F. Supp. 3d at 1158-59 (holding agency not required to use social cost of carbon under NEPA); *Citizens for a Healthy Cmty.*, 377 F. Supp. 3d at 1241 (same); *Appalachian Voices v. FERC*, 2019 WL 847199, at *2 (D.C. Cir. 2019) (same). However, preemptive of such a claim, BLM included an appendix in the EA Addendum addressing this "social cost of carbon" as best it was able. Of course, as Defendants note, Plaintiffs have switched to a new argument, the equally nonsensical "carbon budgets." Doc. 111 at 48.

arguments as to GHG emissions, and indeed nearly all of their arguments throughout the Motion and their merits brief, embody what appears to be a common thread in Dine Citizens' and other Citizen Groups' legal-environmental strategy: (1) starting with broad claims that an agency was noncompliant with applicable environmental statutes, then (2) dwindling their argument to one or a few of the many hundreds of discrete environmental possibilities that could result from any kind of development, and, finally, (3) concluding that because one of these numerous discrete possibilities was not covered in requisite NEPA documentation, all of Dine Citizens' legal burdens are somehow satisfied.

Accordingly, the Court finds that this fourth and final claim by Plaintiffs as to GHG emissions is unsupported by the record and the law, and that Plaintiffs have failed to demonstrate that BLM was arbitrary or capricious or otherwise failed to take a hard look at the impact of emissions resulting from the proposed drilling in the Mancos Shale.

VII. The No Action Alternative

Plaintiffs conclude their merits brief alleging that BLM's EA Addendum lacks consideration of the requisite "No Action Alternative," a baseline representing the status quo to which a federal agency compares its proposed actions. *See* 40 C.F.R. § 1508.9(a)(1). While the majority of Plaintiffs claims have been framed under an assumption that the EA Addendum does not exist or is not before the Court, the argument here comes from a very close scrutiny of the EA Addendum. It also misunderstands the law.

As courts have explained, the "no action alternative" permits the public to compare the environmental consequences of a proposed action to the status quo. *See Pac. Coast Fed'n of Fishermen's Assocs. v. U.S. Dep't of Interior*, 929 F. Supp. 2d 1039, 1048 (E.D. Cal. 2013). However, there is not a "no action alternative" analysis set forth in BLM's EA Addendum, which

Plaintiffs allege is a violation of NEPA's requirements. Plaintiffs are correct that a no action alternative must generally be present under 40 C.F.R. § 1502.14, but Plaintiffs make no reasonable argument that every form of an EA must recount a "no action alternative" analysis when one has already been conducted and included in the administrative record. Indeed, BLM's EA Addendum is not a replacement for its initial EAs. Rather, BLM's EA Addendum supplemented certain information with new analysis consistent with the requirements articulated in *Dine II*. The "no action alternative" set forth in BLM's initial EA's, however, needs no supplementation, as the "no action alternative" is restricted to a scenario where BLM does *not* approve the APDs and the proposed oil and gas wells are not drilled. That scenario is thoroughly explained in the initial EAs, AR-046573, AR-072903; *see also* AR-045092, and because the scenario assumed no development, its "impacts" have not changed since BLM's original analysis.

Accordingly, the Court finds that BLM appropriately considered the "no action alternative" in the initial EAs. Plaintiffs merely ask BLM to repeat an exercise which has already been undertaken, thoroughly analyzed, included in the record and considered as to the proposed drilling consistent with the requirements of NEPA. Plaintiffs' argument is neither economical nor supported by the controlling law.

CONCLUSION

Plaintiffs have failed to carry their burden of proving that BLM's grant of APDs for the drilling of oil and gas wells in the Mancos Shale was arbitrary and capricious under 5 U.S.C. § 706(2)(A), or that BLM failed to take a hard look at the environmental impact such drilling activity would impose on the local environment under NEPA. *See Balt. Gas*, 462 U.S. at 105. Indeed, BLM's decision to grant APDs for drilling in the Mancos Shale is based on a consideration of relevant factors and good-faith efforts to undertake a significant and far-reaching assessment of

the relevant environmental consequences. See Marsh, 490 U.S. at 370-71. In light of the EA

Addendum, and the discretion afforded to BLM's qualified experts, Plaintiffs have therefore failed

to demonstrate any likelihood of success on the merits. Accordingly, Plaintiffs' request for

preliminary injunction is hereby **DENIED**.

The Court has come to this conclusion following a detailed analysis of the parties'

arguments and the administrative record lodged with the Court. The subject Motion came to the

Court in August of 2019, and a significant amount of judicial resources have been expended on its

disposition since then. Nothing remains for further litigation with regards to discovery, and since

Plaintiffs' Motion is reviewed under the APA, the Court has no jurisdiction to review this case

beyond the fully developed administrative record. The fourth prong in the preliminary injunction

test required the Court to undergo a detailed merits analysis, an analysis ultimately revealing that

Plaintiffs have not and cannot not demonstrate that BLM's documentation fails NEPA's

requirements. Because no further analysis by the Court or argumentation by the parties will change

the Court's disposition as to the merits of this litigation, the Court accordingly grants Defendants'

request (Doc. 111 at 49) and Plaintiffs' claims are hereby **DISMISSED** with prejudice.

IT IS SO ORDERED.

WILLIAM P. JOHNSON

CHIEF UNITED STATES DISTRICT JUDGE

64

APPENDIX: TABLE OF ACRONYMS

BLM Bureau of Land Management

Mancos Shale Mancos Shale/Gallup Sandstone formation

APD Application for Permit to Drill

NEPA National Environmental Policy Act
NHPA National Historic Preservation Act

Dine I Diné Citizens Against Ruining Our Env't v. Jewell, 2015 U.S. Dist. LEXIS

109986, 2015 WL 4997207 (D.N.M. Aug. 14, 2015)

EA Environmental Assessment

EIS Environmental Impact Statement

Dine II Diné Citizens Against Ruining Our Env't v. Bernhardt, 923 F.3d 831, 850-

852 (10th Cir. 2019)

Federal Defendants Defendants

TRO Temporary Restraining Order

Motion The Motion For Temporary Restraining Order And Preliminary Injunction

together with Plaintiffs' subsequent merits briefs and declarant affidavits

EA Addendum Revised addendum provided by BLM to supplement the original EAs

underlying Dine I and Dine II

RFDS Reasonably Foreseeable Development Scenario

FONSI Finding of No Significant Impact

RMP Resource Development Plan

APA Administrative Procedure Act

FLPMA Federal Land Policy and Management Act

Dine Citizens Against Ruining the Environment

OSM United States Office of Surface Mining Reclamation & Enforcement

Dine v. OSM I Diné Citizens Against Ruining Our Env't v. United States Office of Surface

Mining Reclamation & Enforcement, 2015 U.S. Dist. LEXIS 45261, 2015

WL 1593995 (D. Colo. 2015)

Dine v. OSM II Dine Citizens Against Ruining Our Env't v. United States Office of Surface

Mining Reclamation & Enforcement, 643 Fed. Appx. 799 (10th Cir. 2016)

Dine v. OSM Collectively, Dine v. OSM I and Dine v. OSM II

NAAQS National Ambient Air Quality Standards

AQI Air Quality Index

GHG Greenhouse Gas Emissions